LBT-A495

SERVICE MANUAL

AEP Model
E Model
Australian Model
PX Model

- **LBT-A495 is composed of following models. As for the service manual, it is issued for each component model, then, please refer to it.**

COMPONENT MODEL NAME FOR THESE SYSTEM

	LBT-A495				
	AEP	E	AUS	MX	PX
COMPACT DISC STEREO DECK RECEIVER	HCD-A495				
TURN TABLE	PS-LX56P				
SPEAKER SYSTEM		SS-D390			

AUS : Australian
MX : Mexican

PARTS LIST

NOTE :
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Part No.	Description
1-467-547-11	COMMANDER, STANDARD (RM-S421)
1-501-374-11	ANTENNA, LOOP
1-501-594-11	ANTENNA (FM) (AEP)
1-501-659-11	ANTENNA (FM) (E, AUS, MX, PX)
2-181-754-21	COVER, BATTERY (For RM-S421)
3-758-505-41	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)
3-758-505-51	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP)
3-758-505-71	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (E, AUS, PX)
3-758-505-81	MANUAL, INSTRUCTION (SPANISH) (MX)
* 4-957-893-11	CUSHION (SS-D390)
* 4-967-047-01	CUSHION (HCD)
* 4-963-211-01	INDIVIDUAL CARTON (MX)
* 4-963-212-01	INDIVIDUAL CARTON (AEP)
* 4-963-213-01	INDIVIDUAL CARTON (AUS, PX)
* 4-963-214-01	INDIVIDUAL CARTON (E)
A-4674-087-A	TURN TABLE MAT ASSY (PS-LX56P)
* 4-947-532-01	SNOW BOX (L) (PS-LX56P)
* 4-947-533-01	SNOW BOX (R) (PS-LX56P)

COMPONENT HI-FI STEREO SYSTEM

SONY®

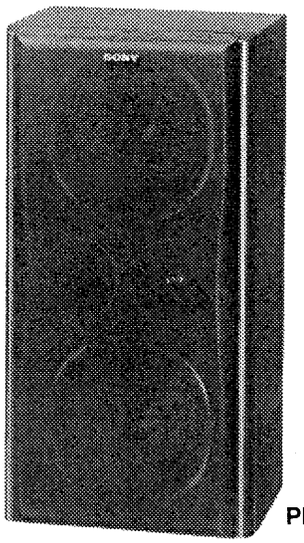
9-959-422-11

Sony Corporation
Audio Group

English
94C0959-1D
Printed in Japan
© 1994.3
Published by Audio Sector Quality Assurance Dept.

SS-D390

SERVICE MANUAL



E Model
Australian Model
PX Model

This set is the speaker system in LBT-A220K/A390/A390K/A495.

Photo : R-CH

SPECIFICATIONS

Speaker system	: 2-way
Mass	: Approx. 6.3kg per speaker
Dimensions	: Approx. 260×505×210mm (w/h/d)

Design and specification are subject to change without notice.

SPEAKER SYSTEM

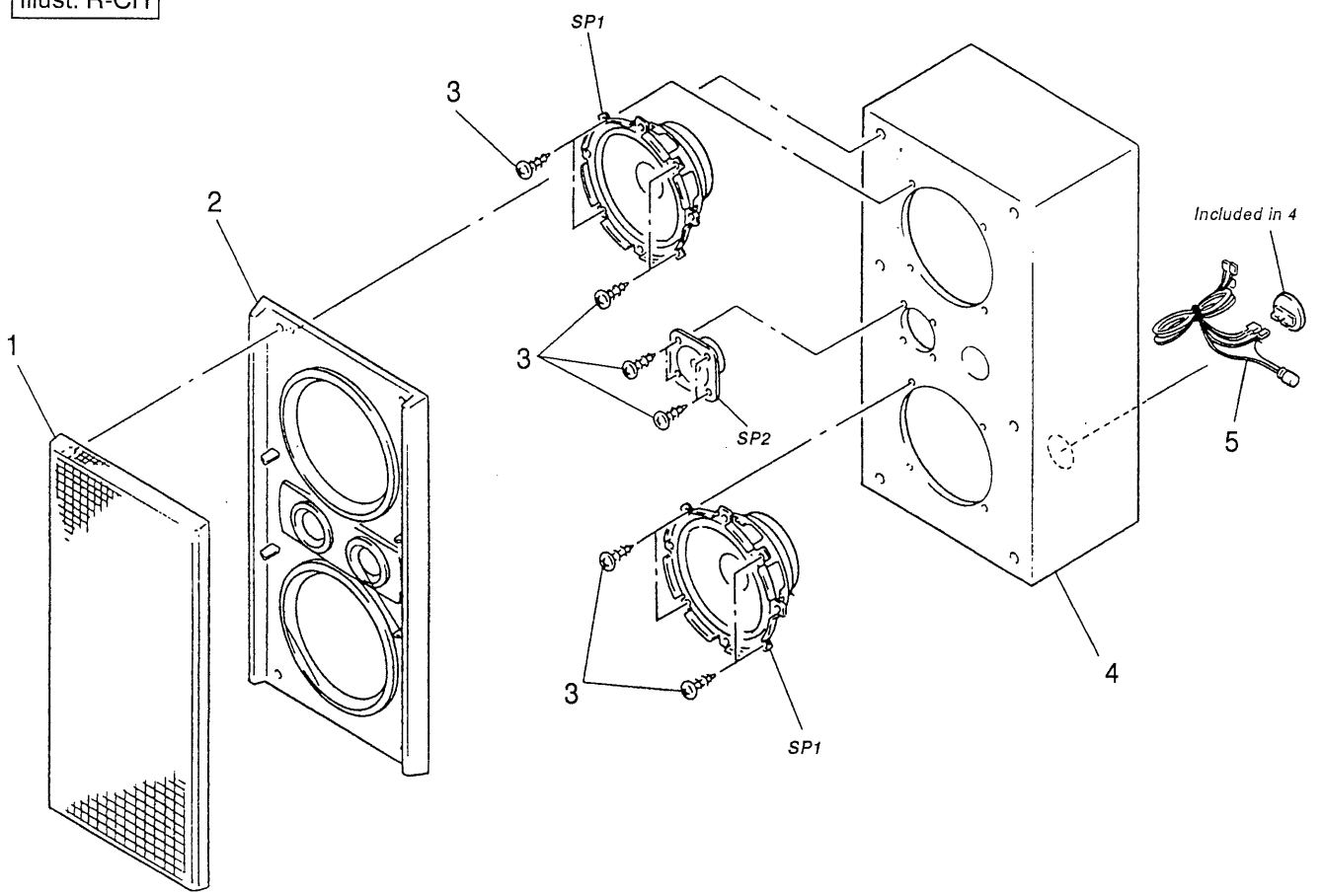
SONY®

2. EXPLODED VIEW AND PARTS LIST

NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

Illust. R-CH



Ref. No.	Part No.	Description	Remark
1	X-4944-504-1	FRAME ASSY, GRILLE	
2	4-955-873-23	PANEL, FRONT (L)	
2	4-955-874-23	PANEL, FRONT (R)	
3	4-874-614-61	SCREW M3.5X16	
4	X-4944-505-1	CABINET (L) ASSY, SPEAKER	
4	X-4944-506-1	CABINET (R) ASSY, SPEAKER	
5	1-751-556-11	CORD, CONNECTION	

Ref. No.	Part No.	Description	Remark
SP1	1-504-217-11	SPEAKER (16cm)	
SP2	1-504-218-11	SPEAKER (6cm)	

****

ACCESSORIES & PACKING MATERIALS

****

*	4-957-893-11	CUSHION	

English
94B0225-1D
Printed in Japan

©1994.2

Published by Audio Sector Quality Assurance Dept.

PS-LX56/LX56P

SERVICE MANUAL

Ver 1.1 2001. 07

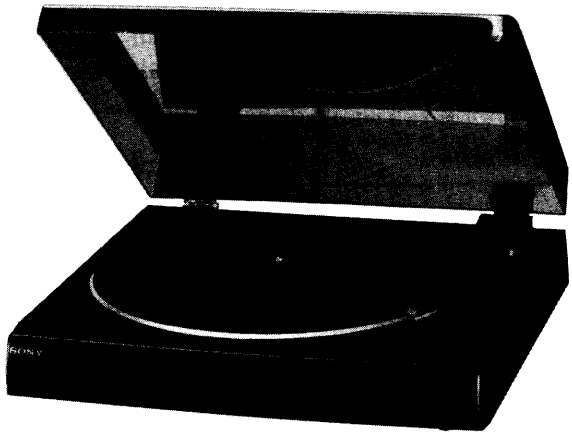


PHOTO : PS-LX56

US Model
Canadian Model
PX Model
Tourist Model
PS-LX56
AEP Model
E Model
Australian Model
PS-LX56/LX56P
UK Model
PS-LX56P

PS-LX56/LX56P are the turntable section in LBT-A190/A195/A290/A290K/A295/A390/A390K/A395/A490/A490K/A495/D150/D250/D550/G1000/G2000.

SPECIFICATIONS

	(PS-LX56)
Turntable	
Platter	30cm (12 in.)
Motor	DC servo motor
Drive system	Belt drive
Speed	33 1/3 rpm/45 rpm switchable
Wow and flutter	0.2% (WRMS)
Signal-to-noise ratio	60 dB (DIN-B)
Automatic system	Return, reject
Tonearm	
Type	Dynamically blanced
Pivot-to-stylus length	203 mm (8 in.)
Overall arm length	235 mm (9 1/4 in.)
Cartridge	
Type	Moving magnet type
Frequency response	20 Hz-20kHz
Stylus	CN-234
General	
Dimensions	355 × 94 × 345 mm(w/h/d) (14 × 3 3/4 × 13 5/8 inches)
Weight	Approx. 2.5 kg (5 lb 8 oz)
Power requirement	US and Canadian model : 120V AC, 60Hz European model : 220-230V AC, 50/60Hz Australian model : 240V AC, 50Hz Model for other countries : 110-120V/220-240V adjustable with the voltage selector AC, 50/60Hz
Power consumption	2 W
Accessory supplied	45-rpm adaptor (1)
Optional accessories	Replacement stylus CN-234 Stat spray XP-C10 Cleaner XP-C1, XP-C2

Turntable	(PS-LX56P)
Platter	30 cm
Tone arm type	Dynamically balanced
Cartridge type	Moving magnet type
Stylus	Sony CN-234 (0.6 mil diamond)
Mass	Approx. 2.3 kg (5 lb 1 oz)
Dimensions	Approx. 355 x 95 x 345 mm (14 x 3 3/4 x 13 5/8 inches) (w/h/d, including projections)

Design and specifications subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

STEREO TURNTABLE SYSTEM

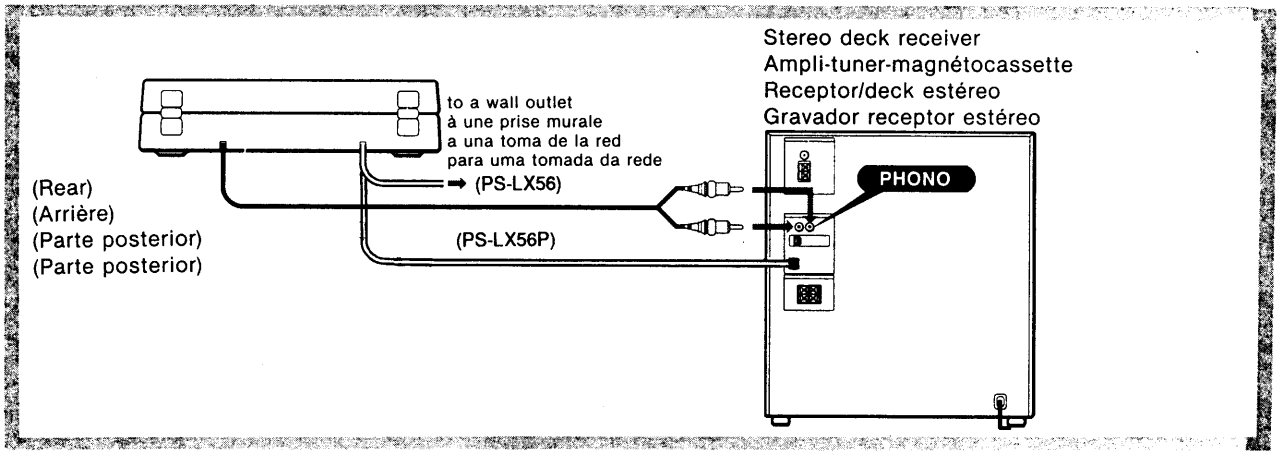
SONY

9-959-216-12
2001G0200-1
© 2001.7

Sony Corporation
Home Audio Company
Shinagawa Tec Service Manual Production Group

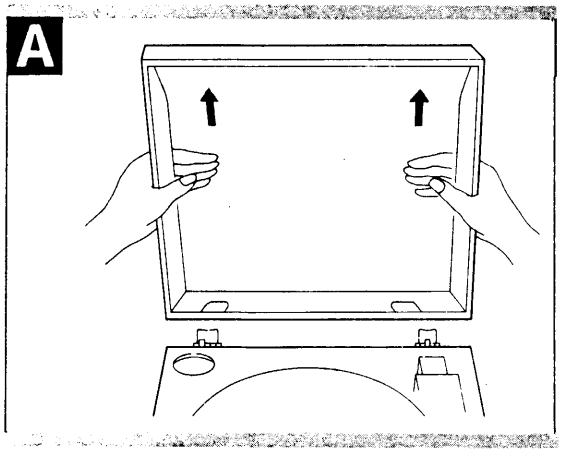
Connections

Note
Connect the red plug to the right-channel jack (R), and the white plug to the left-channel jack (L).



Notes on installation
- Place the turntable on a level surface.
- Avoid placing the unit near electrical appliances (such as a television, hair dryer, or fluorescent lamp) which may cause hum or noise.
- Place the turntable where it will not be subject to any vibration, such as from speakers, slamming of doors, etc.
- Keep the unit away from direct sunlight, extremes of temperature, and excessive dust and moisture.

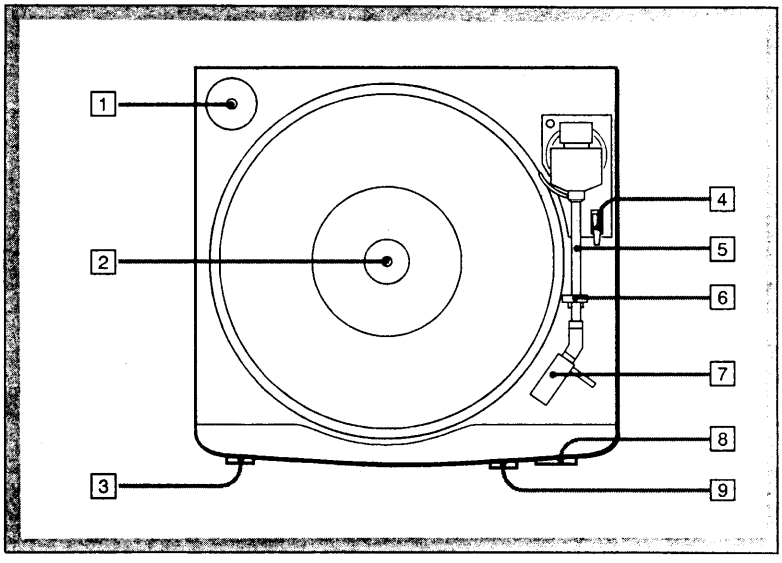
Nota
Conecte la clavija roja a la toma del canal derecho (R), y la blanca a la del canal izquierdo (L).



To remove the dust cover A

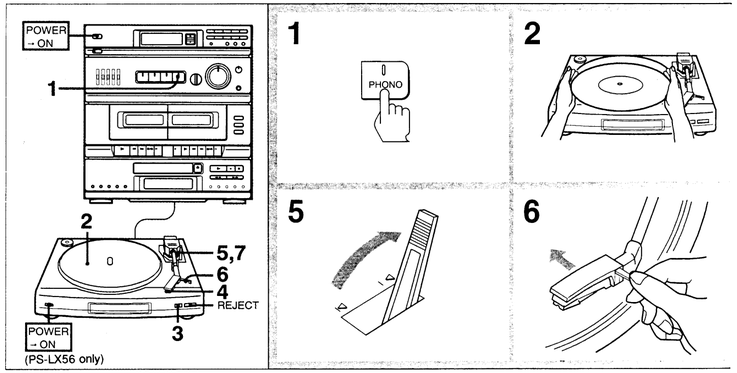
Open the cover fully and pull it up.

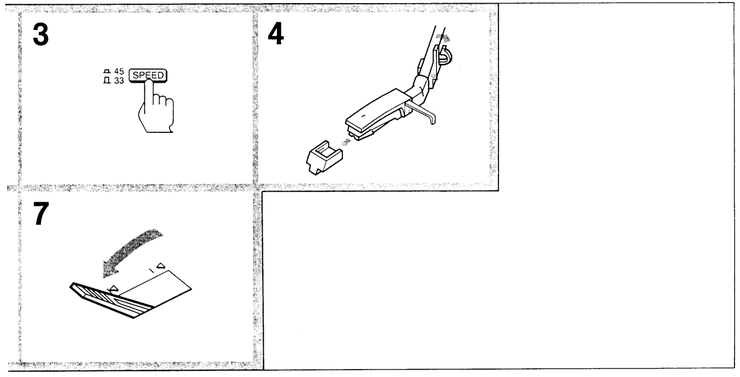
Location of Controls



1 45-rpm adaptor
2 Centre spindle
3 POWER switch (PS-LX56)
4 Cueing lever
5 Tonearm
6 Armrest
7 Cartridge
8 REJECT button
9 Speed selector

Playing Records





When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

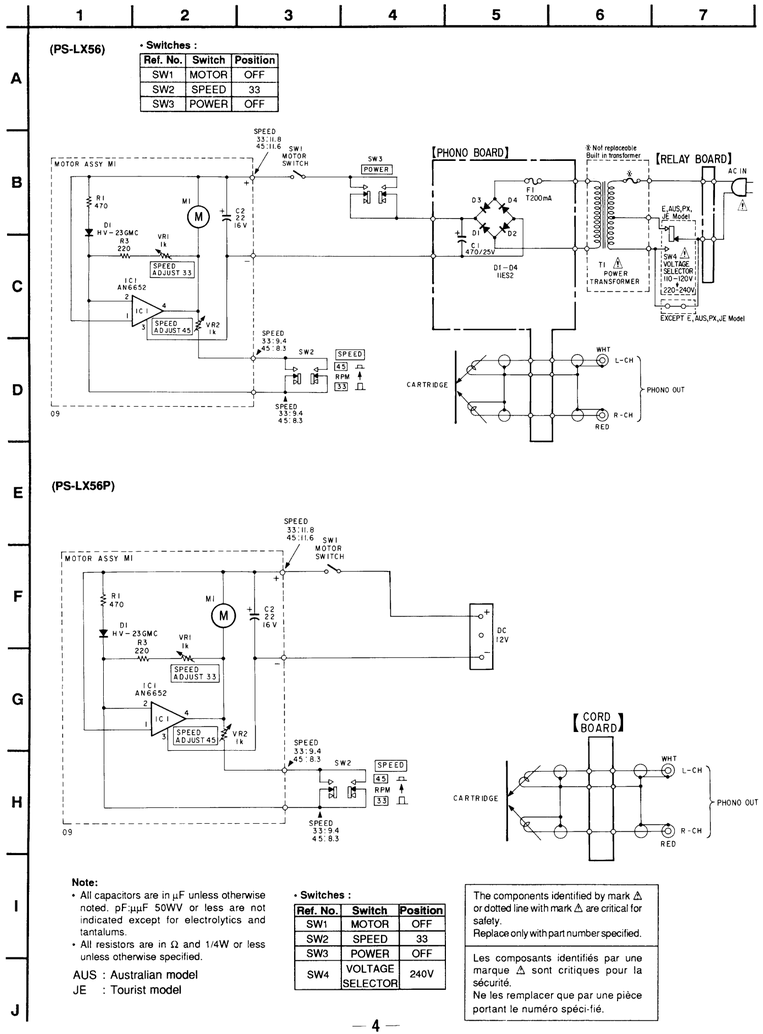
To play a different part of the record
Lift the tonearm by setting the cueing level to ▼, move the tonearm by hand to the desired point, then set the cueing lever to ▼.

To play a 17-cm record
Use the supplied adaptor

If the tonearm moves outward when you move it colse to the centre
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest
Press REJECT.

SCHEMATIC DIAGRAMS



Note:
- All capacitors are in μF unless otherwise noted. pF:μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

AUS : Australian model
JE : Tourist model

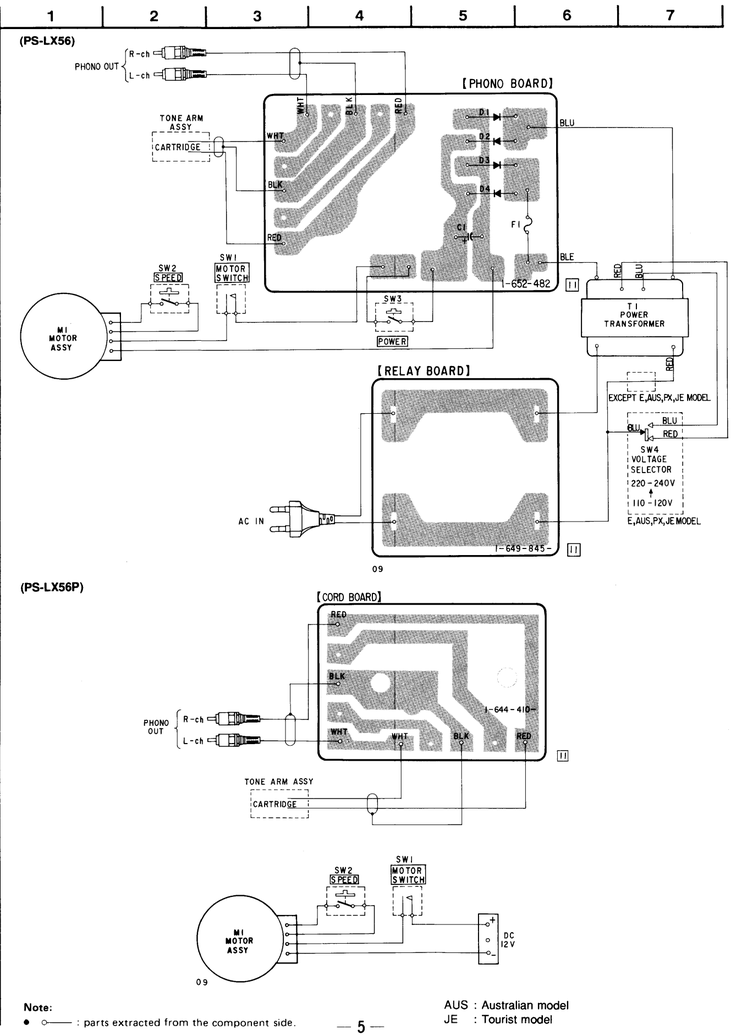
• Switches :

Ref. No.	Switch	Position
SW1	MOTOR	OFF
SW2	SPEED	33
SW3	POWER	OFF
SW4	VOLTAGE SELECTOR	240V

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spéci-fié.

WIRING DIAGRAMS



Note:
- ○—— : parts extracted from the component side.

AUS : Australian model
JE : Tourist model

EXPLODED VIEW

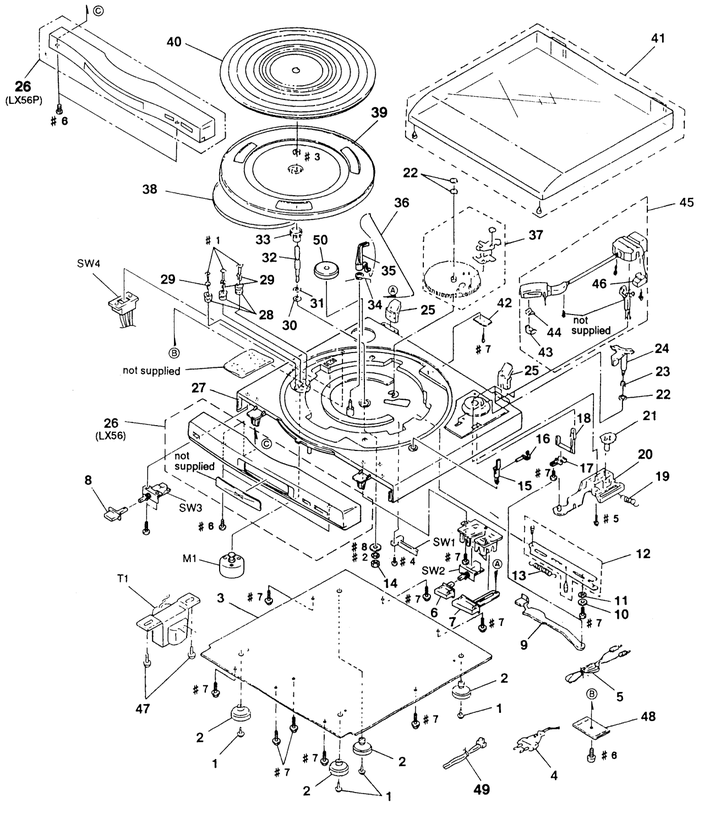
NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- AUS : Australian model
- CND : Canadian model
- EE : East European model
- IT : Italian model
- MX : Mexican model
- EA : Saudi Arabia model
- SP : Singapore model
- MY : Malaysia model
- JE : Tourist

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.



Ref.No.	Part No.	Description	Remark
1	4-950-497-01	FOOT SEAT	
2	4-950-490-01	PLASTIC STAND	
* 3	4-961-804-01	BUTTON BOARD	
⚠4	1-575-651-61	CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)	
⚠4	1-575-975-11	CORD, AC (LX56: CND, US)	
⚠4	1-590-074-11	CORD, AC (LX56: E)	
⚠4	1-690-608-11	CORD, AC (LX56: AUS)	
⚠4	1-696-570-21	CORD, AC (LX56: UK)	
5	1-555-116-11	CORD, PHONO...(BLACK)	
6	4-964-177-01	KNOB SPEED...(BLACK)	
6	4-964-177-11	KNOB SPEED ...(LX56:SILVER, SILVER METALLIC)	
7	4-964-178-01	KNOB REJECT...(BLACK)	
7	4-964-178-11	KNOB REJECT ...(LX56:SILVER, SILVER METALLIC)	
8	4-964-184-01	KNOB POWER (LX56:BLACK)	
8	4-964-184-11	KNOB POWER ...(LX56:SILVER, SILVER METALLIC)	
9	4-947-487-01	RETURN LINK	
10	4-890-173-00	WASHER	
11	3-659-350-00	WASHER	
12	A-4604-947-A	RETURN ASSY, LEVER	
13	4-947-485-01	SPRING (22)	
14	4-947-510-01	NUT	
15	4-947-491-01	ARM REST	
16	A-4660-499-A	ARM CLIP ASSY	
17	4-947-477-01	CUEING (BASE)	
18	4-947-468-01	LEVER, CUEING	
19	4-963-537-01	SPRING	
20	4-963-536-01	LINK RETURN	
21	4-963-535-01	ADJUST CAM	
22	4-947-514-01	4MM CS RING	
23	4-947-467-01	SPRING (6)	
24	4-947-466-01	TONE ARM ELEVATOR	
25	A-4660-498-A	HINGE ASSY	
26	A-4384-982-A	PANEL (B) ASSY, FRONT (LX56: SILVER)	
26	A-4411-941-A	PANEL (B) ASSY, FRONT (LX56: SILVER METALLIC)	
26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (US)	
26	A-4660-578-A	FRONT PANEL (G) ASSY (LX56: BLACK)	
26	A-4660-976-A	FRONT PANEL (G) ASSY (LX56P)	
* 27	4-950-487-01	MAIN CABINET (B)...(BLACK)	
* 27	4-950-487-11	MAIN CABINET (B) ...(LX56:SILVER, SILVER METALLIC)	
28	4-947-505-01	CUSHION MOTOR	
29	4-947-504-01	COLLAR	
30	3-451-162-00	WASHER (56)	
31	3-701-445-21	WASHER	
32	4-947-498-01	STELL BALL	
33	4-947-497-01	GEAR	
34	4-947-496-01	SPRING (34)	
35	4-947-495-01	WIPER REJECT	
36	4-948-101-01	SPRING (38)	
37	A-4604-916-A	GEAR ASSY, SPUR	
38	4-947-503-01	BELT	
39	4-947-494-01	TURNTABLE PLATTER	
40	4-947-539-01	RUBBER MAT	
41	A-4604-946-A	DUST COVER ASSY	
* 42	1-652-482-11	PHONO BOARD (LX56)	
* 42	1-644-410-11	CORD BOARD (LX56P)	
43	4-948-095-01	COVER, CARTRIDGE	
44	4-951-290-01	STYLUS (CN-234)	
45	A-4604-940-A	ARM ASSY, TONE	
46	4-947-464-01	COUNTER WEIGHT	
47	4-952-961-01	SCREW (LX56)	
* 48	1-649-845-11	RELAY BOARD (LX56)	
49	1-557-109-21	CORD, DC (LX56P)	
50	3-701-806-00	ADAPTOR,45	
M1	A-4604-945-A	MOTOR ASSY	
SW1	1-570-666-11	SWITCH (LEAF)	
SW2	1-571-089-11	SWITCH, PUSH (SPEED) (1 KEY)	
SW3	1-692-211-11	SWITCH, PUSH (POWER) (1 KEY) (LX56)	
⚠SW4	1-692-835-11	VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP)	
⚠T1	1-450-987-11	TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS)	
⚠T1	1-450-987-21	TRANSFORMER, POWER (LX56: AUS, E, PX, EA, JE, MX, SP)	
⚠T1	1-450-987-31	TRANSFORMER, POWER (LX56: MY)	
⚠T1	1-450-987-41	TRANSFORMER, POWER (LX56: U, CA)	

CORD | PHONO | RELAY

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list is given in the last of this parts list.

- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

- AUS : Australian model
- CND : Canadian model
- EE : East European model
- IT : Italian model
- MX : Mexican model
- EA : Saudi Arabia model
- SP : Singapore model
- MY : Malaysia model
- JE : Tourist

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref.No.	Part No.	Description	Remark
*	1-644-410-11	CORD BOARD (LX56P)	
		**********	
**********			
*	1-652-482-11	PHONO BOARD (LX56)	
		**********	
		< CAPACITOR >	
C1	1-126-012-11	ELECT 470uF 16V	
		< DIODE >	
D1	8-719-200-82	DIODE 11ES2	
D2	8-719-200-82	DIODE 11ES2	
D3	8-719-200-82	DIODE 11ES2	
D4	8-719-200-82	DIODE 11ES2	
		< FUSE >	
⚠F1	1-532-613-XX	FUSE TIME-LAG (T200mA)	
**********			
*	1-649-845-11	RELAY BOARD (LX56)	
		**********	
**********			

Ref.No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	3-758-045-11	MANUAL INSTRUCTION (English, French, Spanish, Portuguese) (LX56 AEP, CND)	
	3-758-045-21	MANUAL INSTRUCTION (English) (LX56 US, UK)	
	3-758-045-41	MANUAL INSTRUCTION (German, Dutch, Swedish, Italian) (LX56 AEP, IT)	
	3-758-045-51	MANUAL INSTRUCTION (English, French, Spanish, Chinese) (LX56 AUS, E, PX, MX, EA, MY, SP, JE)	
	3-758-045-61	MANUAL INSTRUCTION (English, German, Polish) (LX56 EE, CIS)	
*	4-947-532-01	SNOW BOX (L)	
*	4-947-533-01	SNOW BOX (R)	
	3-701-806-00	ADAPTOR,45	
**********			
		********** HARDWARE LIST **********	
#1	7-621-773-87	SCREW (64)	
#2	7-623-210-22	WASHER (57)	
#3	7-624-110-04	6MM E RING	
#4	7-685-105-01	SCREW (59)	
#5	7-685-645-79	SCREW (68)	
#6	7-685-646-79	SCREW (60)	
#7	7-685-647-79	SCREW (58)	
#8	7-688-005-01	WASHER (69)	

MEMO

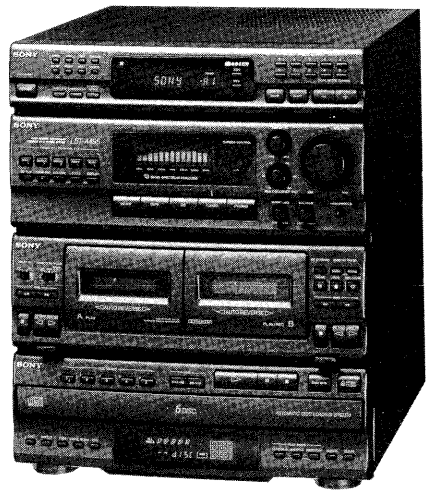
REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.1	2001.07	PDF registration (including : 9-959-216-81, 9-959-216-82, 9-959-216-83, 9-959-216-91)
1.0	1993.11	New

HCD-A495

SERVICE MANUAL



AEP Model
E Model
Australian Model
PX Model

HCD-A495 is the tuner, deck, CD player and amplifier section in LBT-A495.

CD SECTION	Model Name Using Similer Mechanism		HCD-A295
	Base Unit Type		BU-5BD13
	Optical Pick-up Type		KSS-240A
DECK SECTION	Model Name Using Similer Mechanism		HCD-A390
	Tape Transport Mechanism Type	DECK–A	TCM-190RA12AL
		DECK–B	TCM-190RB53A

SPECIFICATIONS

Compact disc deck receiver

Tuner Section

System: FM stereo; FM/AM supertheterodyne tuner

FM tuner section
- Tuning range: 87.5 to 108 MHz
- Antenna: 75 ohms unbalanced (AEP, IT models); 300 ohms balanced (E, MX, AUS, PX models); External antenna terminal
- Intermediate frequency: 10.7 MHz

AM tuner section
- Tuning range: IT model : AM : 522 to 1,611 kHz; AEP model : MW : 531 to 1,602 kHz; LM : 153 to 279 kHz; Other models : 531 to 1,602 kHz (at 9 kHz step); 530 to 1,710 kHz (at 10 kHz step)
- Intermediate frequency: 450 kHz

Amplifier Section

AEP, IT model :
- DIN power output: 50 W + 50 W (6 ohms, at 1 kHz)
- Continuous RMS power output: 60 W + 60 W (6 ohms, at 1 kHz, 5% THD)
- Music power output: 90 W + 90 W (6 ohms)

Other models :

Peak music power output (6 ohms, 4 speakers driven)
- 750 W (For Singapore and Malaysia)
- 1000W (For other countries)

Continuous RMS power output
- 60 W + 60 W (6 ohms, at 1 kHz, 5% THD)

Input	Jack type	Sensitivity	Impedance
PHONO IN	Phono	3 mV	47 kohms
VIDEO IN	Phono	300 mV	47 kohms

Output	Jack type	Impedance
SURROUND SPEAKER	Phono	(For AEP, IT, Singapore models) Accepts speakers of 16 ohms (For other countries models) Accepts speakers of 8 – 16 ohms
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response 15 Hz to 50 KHz $^{+0}_{-3}$ dB

Cassette deck Section

- Recording system: 4-track 2-channel stereo
- Frequency response: DOLBY NR OFF; With Sony Type II cassette: 40 Hz to 14 kHz (± 3 dB); With Sony Type I cassette: 40 Hz to 13 kHz (± 3 dB)
- Wow and flutter: AEP, IT model : W. PEAK ± 0.2% (DIN); Other models : 0.1% (WRMS)

— Continued on next page —

COMPACT DISC DECK RECEIVER

SONY

CD player Section

Laser	Semiconductor laser
Wavelength	780 – 790 nm
Frequency response	2 Hz to 20 kHz ± 0.5 dB
Signal-to-noise ration	More than 93 dB
Dynamic range	More than 90 dB
Harmonic distortin	Less than 0.08% (1 kHz)
Channel separation	More than 90 dB (1 kHz)

General Section

Power requirements	AEP, IT model : 220 – 230 V AC, 50/60 Hz MX model : 120 V AC, 60 Hz AUS model : 240 V AC, 50Hz Other models : 110 – 120 V /220 – 240 V AC, 50/60 Hz adjustable with the voltage selector AUS model : 240 V AC, 50Hz
Power consumption	AEP, IT models 150 W Other models : 190 W
Mass	AEP, IT models : Approx. 13.5 kg Other models : 13.6 kg
Dimensions	Approx.. 355 x 425 x 405 mm (w /h/ d, including projections)

Note

IT : Italian model
MX : Mexican
AUS: Australian model

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Fiexible Circuit Board Repairing

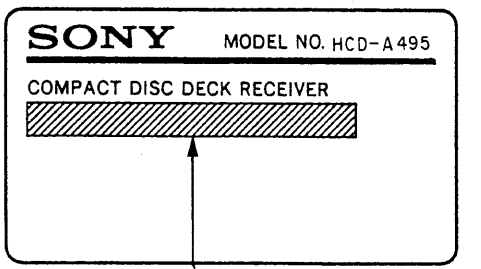
- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

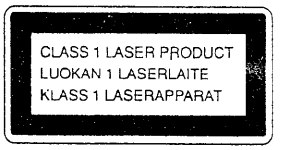
MODEL IDENTIFICATION

— Specification Label —



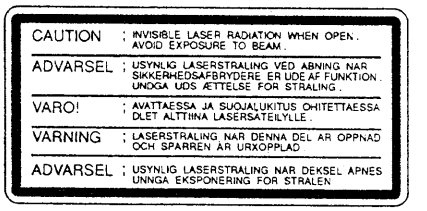
AEP, Italian model : AC : 220 – 230 V ~ 50/60 Hz
E, PX model : AC : 110 – 120V, 220 –240V~50/60 Hz
Mexican model : AC : 120V, 60Hz
Australian model : AC : 240V, 50Hz

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.



Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.


CAUTION ; INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ADVARSEL ; USYNLIG LASERSTRALING VED ABNING NAR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGA UDS ÆTTELSE FOR STRALING.
VARO! ; AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA LASERSATEILYLLE.
VARNING ; LASERSTRALING NAR DENNA DEL AR OPPNAD OCH SPARREN AR URKOPPLAD.
ADVARSEL ; USYNLIG LASERSTRALING NAR DEKSEL APNES UNNGA EKSPONERING FOR STRALEN.

Notes on the transit key

The transit key on the bottom of the unit protects the optical system against shock during transportation.
Before operating the unit, be sure to remove the key by following the instructions on the label, and keep it in a safe place.

When transporting the unit, re-install the key by following the instructions below.

1 Remove all the discs from the CD section.
2 Press the ⏏ button to close the disc tray and wait for "1 (or 2, 3...)" to disappear from the display.
3 Turn off the power.
4 Insert the key into its original hole and lock it in place.

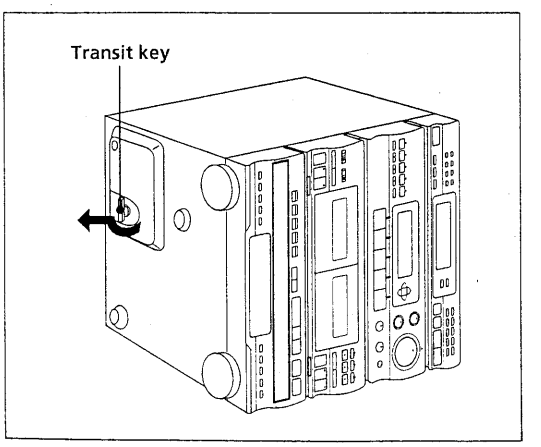


TABLE OF CONTENTS

Section	Title	Page
1.	SERVICING NOTE	3
2.	GENERAL	4
3.	DISASSEMBLY	
3-1.	Main Board and Power Transformer	5
3-2.	CD Assy	5
3-3.	Disc Table Assy	6
3-4.	Bracket (BD) Assy	6
4.	MECHANICAL ADJUSTMENTS	7
5.	ELECTRICAL ADJUSTMENTS	
	DECK Section	7
	TUNER Section	10
	CD Section	11
6.	DIAGRAMS	
6-1.	Circuit Boards Location	13
6-2.	Semiconductor Lead Layouts	14
6-3.	Block Diagrams	
	— CD Section —	16
	— DECK Section —	16
	— MAIN Section —	20
6-4.	Schematic Diagram — TUNER Section —	25
6-5.	Printed Wiring Boards — MAIN Section —	29
6-6.	Schematic Diagram — MAIN Section —	33
6-7.	Schematic Diagram — CD Section —	37
6-8.	Printed Wiring Boards — CD Section —	41
6-9.	Printed Wiring Boards — DECK Section —	45
6-10.	Schematic Diagram — DECK Section —	49
6-11.	Printed Wiring Boards	
	— PANEL (AEP, IT Model) Section —	52
6-12.	Schematic Diagram	
	— PANEL (AEP, IT Model) Section —	55
6-13.	Schematic Diagram	
	— PANEL (E, AUS, MX, PX Model) Section —	60
6-14.	Printed Wiring Boards	
	— PANEL (E, AUS, MX, PX Model) Section —	65
6-15	IC Pin Functions	
	• IC101 (CXD2515Q)	68
	• IC103 (CXD2565M)	70
	• IC321 (CXP82316-041Q)	71
	• IC601 System Contol (μPD78043GF-079-3B9) (AEP, IT Model)	72
	• IC601 System Contol (TMP47C1270AN-H227) (E, AUS, MX, PX Model)	74
	• IC902 Deck Controller (M50964-261FP)	76
	• IC1501 TA Control (μPD78042GF-056-3B9)	78
7.	EXPLODED VIEWS	
7-1.	Cabinet Section	80
7-2.	Front Panel Section	81
7-3.	Mechanism Deck Chassis Section	82
7-4.	Mechanism Deck Section-1 (DECK A: TCM-190RA12AL,DECK B: TCM-190RB53A)	83
7-5.	Mechanism Deck Section-2 (DECK A: TCM-190RA12AL,DECK B: TCM-190RB53A)	84
7-6.	Chassis Section	85
7-7.	Tray Section	86
7-8.	Base Unit Section (BU-5BD13)	87
8.	ELECTRICAL PARTS LIST	88

SECTION 1
SERVICING NOTE

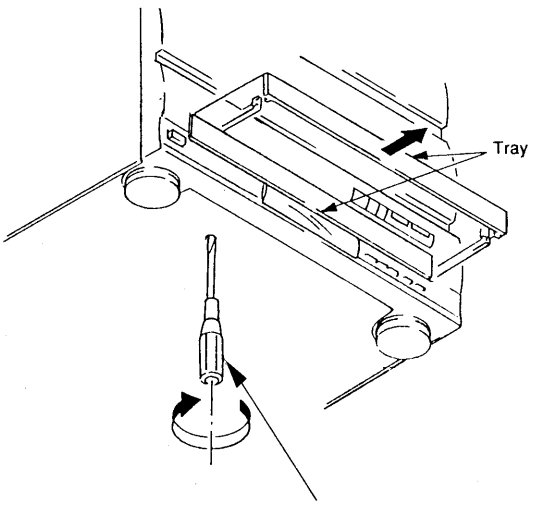
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repain parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF

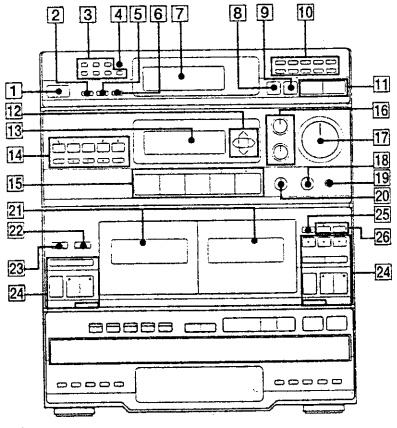


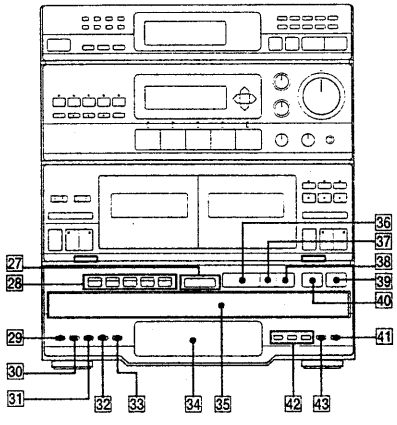
Insert a tapering driver into aperture of the unit bottom, and turn in the direction of arrow (to OUT direction).

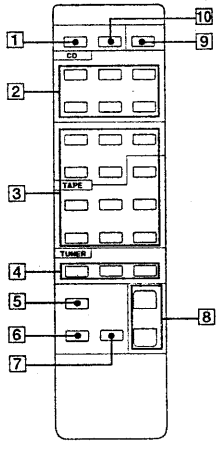
* To close the disc tray, turn the driver in the reverse direction (to IN direction).

This section is extracted from instruction manual.

Location of Controls







Refer to the pages indicated in parentheses for details.

Tuner

1 SYSTEM POWER switch (12)
2 MEMORY button (22)
3 Buttons for setting the clock and timer (14)
4 DISPLAY button (24)
5 CHARACTER button (24)
6 STEREO/MONO button (18)
7 Display window
8 BAND button (18)
9 SHIFT button (22)
10 PRESET STATIONS numeric buttons (22)
11 DUAL MODE TUNING +/– buttons (18, 22, 24, 84)

Amplifier

12 CURSOR CONTROL buttons (72)
13 SPECTRUM ANALYZER display (76)
14 PRESET EQ/PERSONAL FILE buttons and indicators (70, 72, 78, 80)
15 Function selectors and indicators
16 DBS LEVEL and DBS FREQUENCY controls (16)
17 VOLUME control (16)
18 BALANCE control (16)
19 HEADPHONES jack (16)
20 SURROUND control (16)

Cassette Deck

21 Cassette holders
22 DIRECTION MODE selector (26, 28, 32, 35)
23 DOLBY NR (noise reduction) switch (26, 32)
24 Tape operation buttons (26, 32, 34)
⏮◀◀ (AMS*) Leftward fast winding button
▶▶⏭ (AMS*) Rightward fast winding button
▶ Forward play button and indicator
◀ Reverse play button and indicator
■ Stop button
⏏ EJECT button
❚❚ PAUSE button and indicator (deck B only)
● REC Record button and indicator (deck B only)
○ REC MUTE button (deck B only)
25 CD SYNCHRO button (56)
26 DUBBING SPEED (HIGH/NORMAL) buttons and indicators (38)

* AMS is the abbreviation of Automatic Music Sensor.

Compact Disc Player

27 ⏮◀◀/▶▶⏭ (AMS*) buttons (46)
28 DISC SELECT 1-5 buttons (42, 46, 48, 50, 52)
29 TIME button (44, 60)
30 REPEAT button (54)
31 FADE button (68)
32 MUSIC SCAN button (46)
33 EDIT button (64)
34 Display window
35 Disc Tray
36 ▶ (play) button and indicator (42)
37 ❚❚ (pause) button and indicator (42)
38 ■ (stop) button (42)
39 ⏏ OPEN/CLOSE button (42)
40 DISC SKIP button (42, 46)
41 CLEAR (program clear) button (52)
42 PLAY MODE buttons
CONTINUE button (48, 52, 66)
SHUFFLE button (48, 52, 66)
PROGRAM button (50, 60)
43 CHECK (program check) button (52)

* AMS is the abbreviation of Automatic Music Sensor.

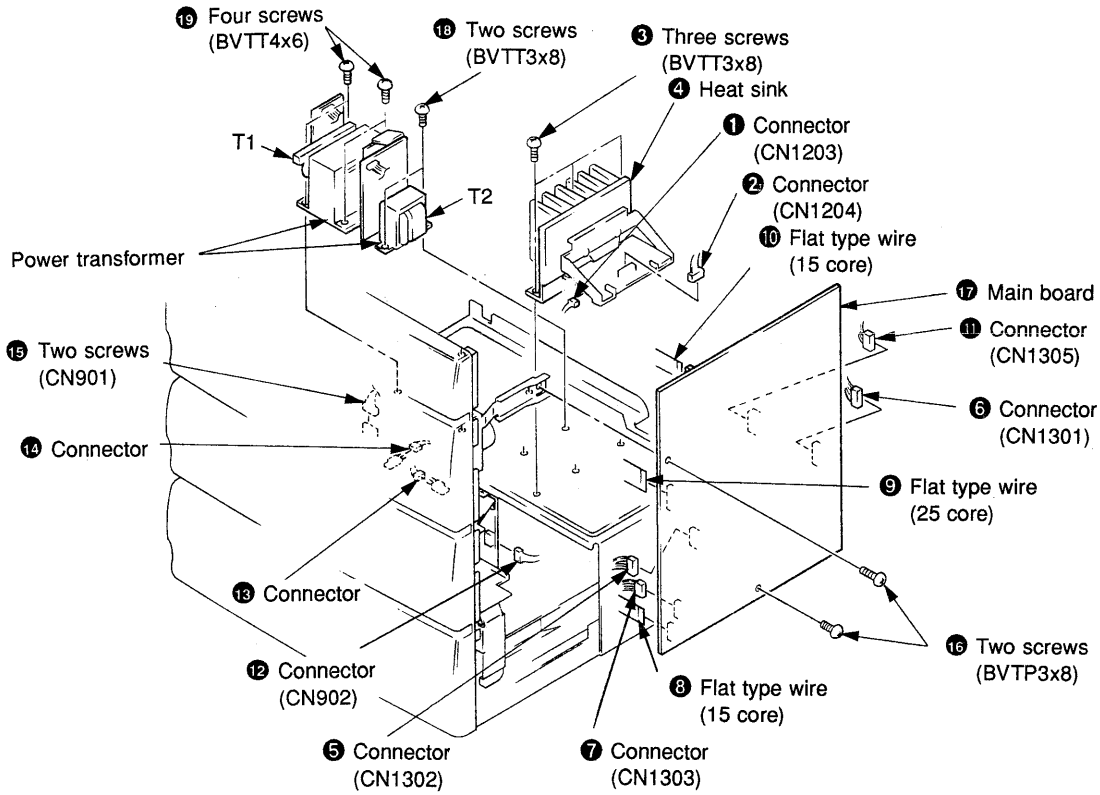
Remote Commander RM-S421

1 FUNCTION button
Each time this button is pressed, the function mode changes among VIDEO, TAPE, CD, TUNER and PHONO.
2 CD operation buttons
DISC SKIP button, ⏮◀◀ / ▶▶⏭ (AMS*) buttons, ▶ (play) button, ❚❚ PAUSE button , ■ (stop) button
3 TAPE DECK A and DECK B operation buttons
◀◀ / ▶▶ (AMS*) buttons,
◀ / ▶ Play buttons,
■ Stop buttons
DECK B only
● Recording button,
❚❚ Pause button
4 Tuner operation buttons
SHIFT button
PRESET +/– buttons
These buttons are used to select the preset station number.
5 EQUALIZER button
6 SELECT 5 button
Each time the button is pressed, the preset equalization switches among 5 preset patterns (HALL, DANCE, VOCAL, POPS and BGM).
7 P.FILE button
8 VOL (volume) +/– buttons
9 SYSTEM POWER button
10 SLEEP button

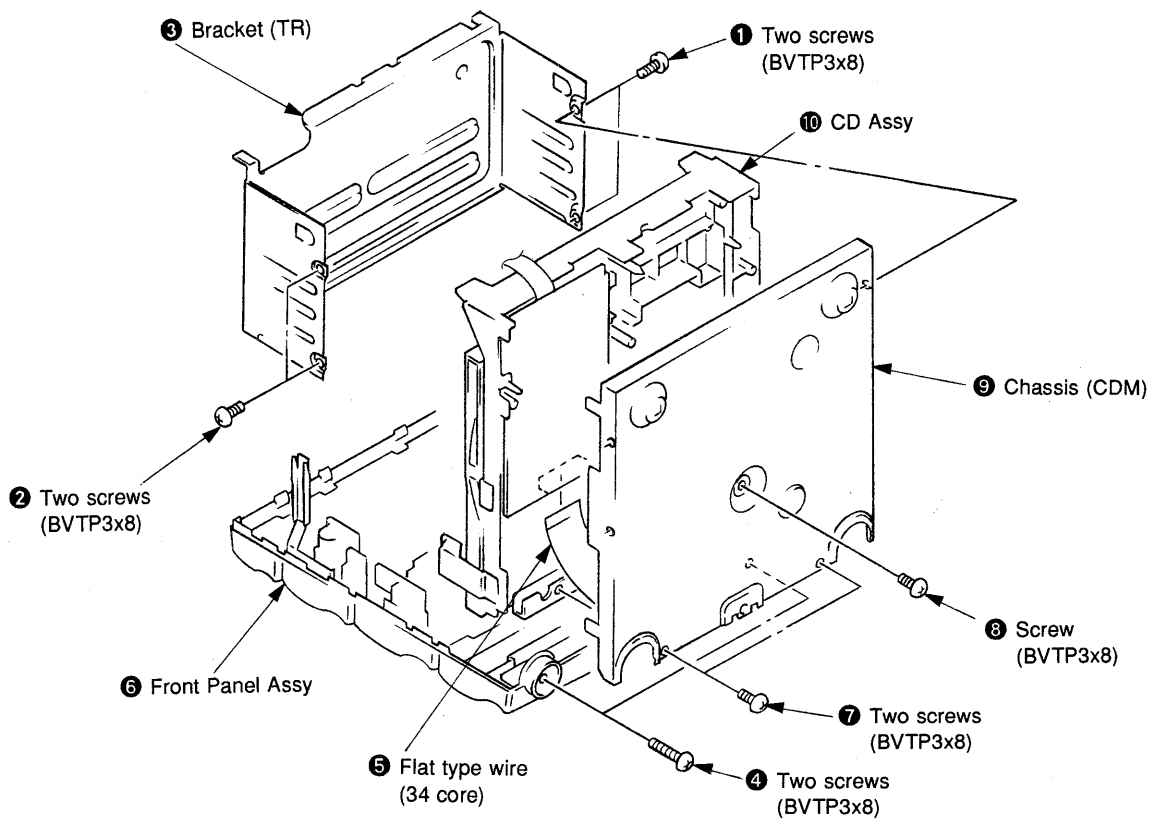
* AMS is the abbreviation of Automatic Music Sensor.

SECTION 3
DISASSEMBLY

3-1. MAIN BOARD AND POWER TRANSFORMER

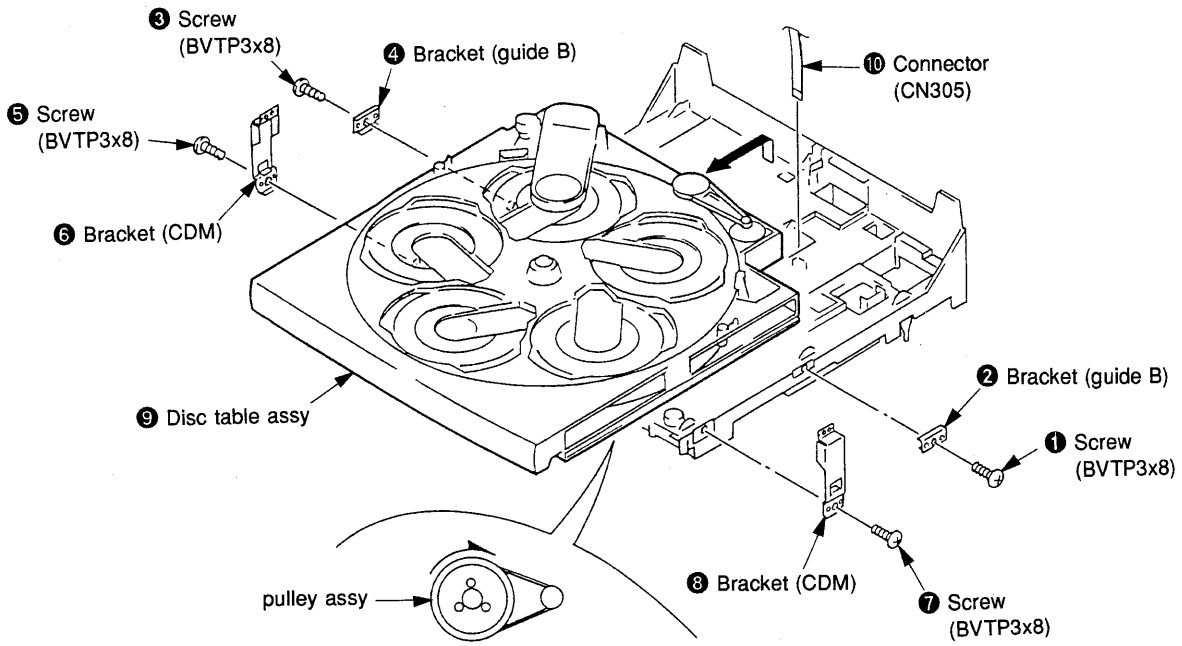


3-2. CD ASSY



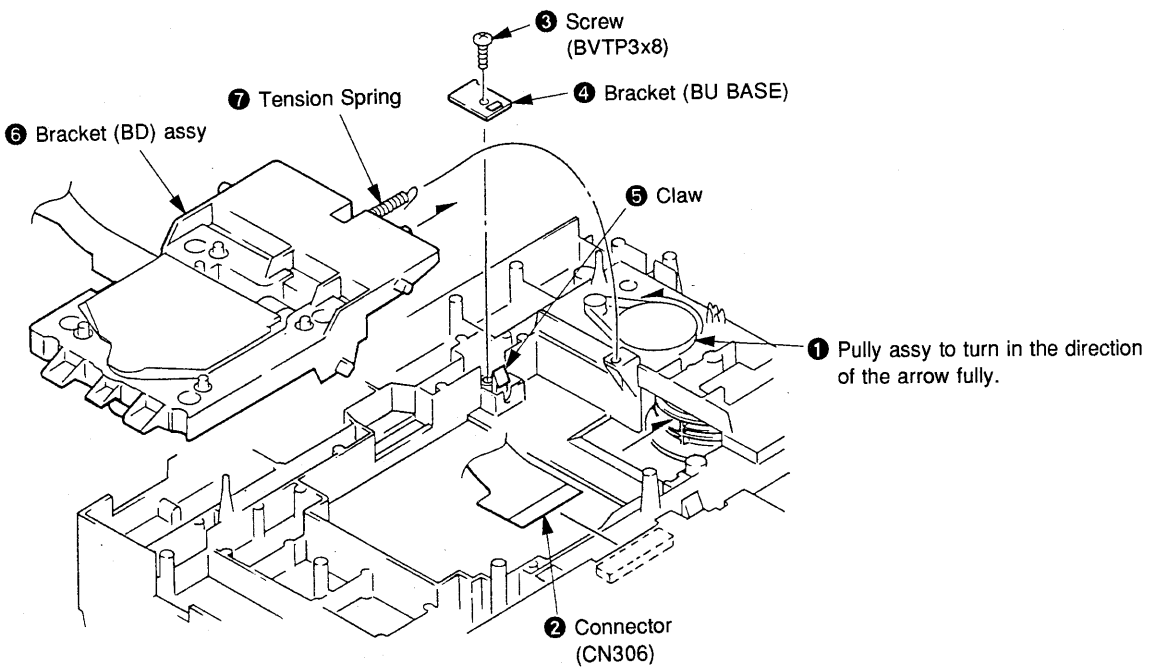
3-3. DISC TABLE ASSY

Note on assembly : Ture the pully assy in the direction of the arrow. Dowen the bracket (BD) assy, and assemble the disc table assy.



3-4. BRACKET (BD) ASSY

Note on assembly : Set to the arrow portion of gear (loading A) for shaft (CAM).


❸ Screw (BVTP3x8)
❼ Tension Spring
❹ Bracket (BU BASE)
❻ Bracket (BD) assy
❺ Claw
❶ Pully assy to turn in the direction of the arrow fully.
❷ Connector (CN306)

SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcoholmoistened swab:
   record/playback head — pinch roller
   erase head — rubber belt
   capstan — idler
2. Demagnetize the record/playback head with a head demagnetizer.
   (Head demagnetizer do not approach for the erase head.)
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustment should be performed with the rated power supply voltage unless otherwise noted.

[Torque Measurement]

Torque	Torque Meter	Meter Reading
FWD	CQ-102C	30 to 65 g•cm 0.42 – 0.9 oz•inch
FWD Back Tension	CQ-102C	1 to 6 g•cm 0.014 – 0.08 oz•inch
REV	CQ-102RC	30 to 65 g•cm 0.42 – 0.9 oz•inch
REV Back Tension	CQ-102RC	1 to 6 g•cm 0.014 – 0.08 oz•inch
FF, REV	CQ-201B	70 to 120 g•cm 0.97 – 1.65 oz•inch

SECTION 5
ELECTRICAL ADJUSTMENTS

DECK SECTION

1. The adjustment should be performed in the publication.
   (Be sure to make playback adjustment at first.)
2. The adjustment and measurement should be performed for both L-CH and R-CH.
   - Switch position
     DOLBY NR switch: OFF

Test tape

Tape	Contents	Used for
P-4-A100	10kHz, –10dB	Head Azimuth Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

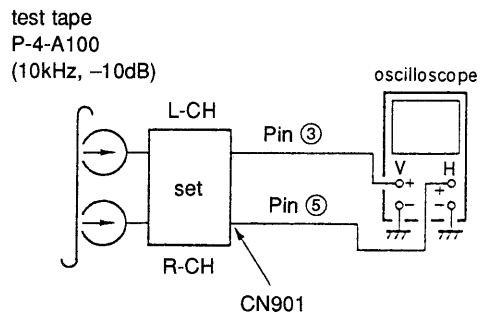
0dB = 0.775V

[Record/playback Head Azimuth Adjustment]

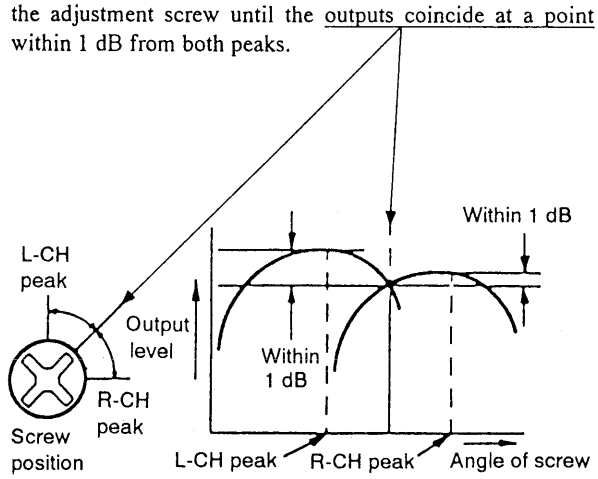
Deck A **Deck B**

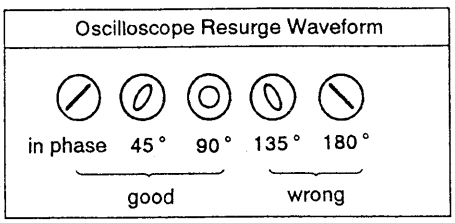
Procedure:

1. FWD/REV: Playback mode



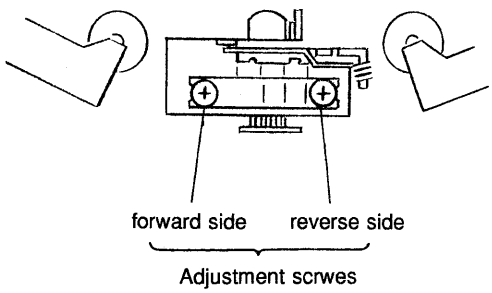
2. Turn the adjustment screw and check where the output peaks are. If the peaks of L-CH and R-CH do not coincide, turn the adjustment screw until the outputs coincide at a point within 1 dB from both peaks.





3. Change the REV playback mode and repeat the steps 1 to 2.
4. After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location: Record/playback head

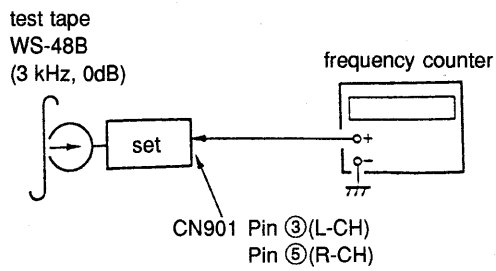


[Tape Speed Adjustment] Deck A Deck B

Procedure:

- Adjust the high speed first, starting from Deck A and then Deck B.

— Playback Mode —



(High Speed Adjustment)

1. Short-circuit CN904 (MAIN TC BOARD) with the power off.
2. Set deck A into the FWD mode.
3. Turn on the power, press the High speed DUB switch , and set high speed playback.
4. Adjust deck A : RV72A (H) so that the reading of the frequency counter becomes the specified value.
5. Stop deck A.
6. Carry out steps 2 to 5 for deck B in the same way.
7. After adjusting, unshort-circuit CN904.

(Normal Speed Adjustment)

1. Set the FWD playback mode.
2. Adjust deck A: RV71A (L), deck B: RV71B (L) so that the reading of the frequency counter becomes the the adjustment value.

Adjustment Values:

High Speed	6000 ± 30Hz
Normal Speed	3000 ± 15Hz

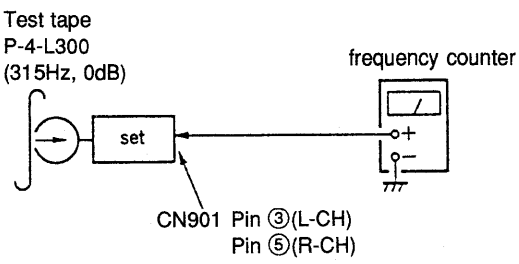
Adjust so that the difference between tape top and tape end is within 3%. Adjust so that the deviation between the speeds of deck A and deck B at the tape top is within 1.0%.

Adjustment Location: MD-A, B boards

[Playback Level Adjustment] Deck A Deck B

Procedure:

— Playback Mode —



Adjust deck A: RV11A (L-CH), RV21A (R-CH), deck B: RV11B (L-CH), RV21B (R-CH) so that the output level is within the adjustment values specified.

Adjustment Level:

CN901 level: –7.5 dB ± 0.5 dB (0.31 to 0.35V)
Level Difference between Channels:
Within 1.0 dB

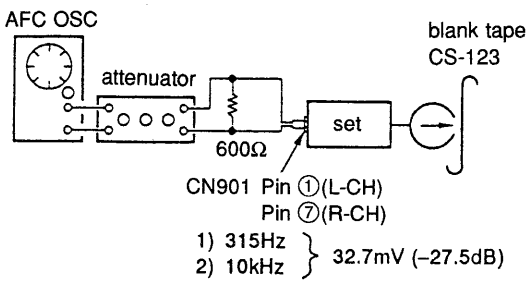
Check that the playback level does not change when playback and stop is repeated.

Adjustment Location: MD-A, B boards

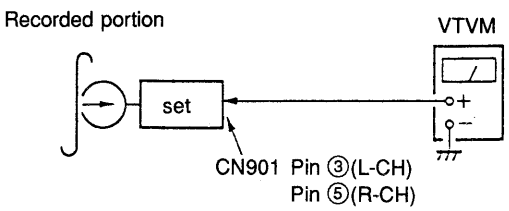
[Record Bias Adjustment] Deck B

Procedure:

1. Record Mode



2. Playback Mode



Playback the signal recorded at step 1, and check that the adjustment value specified below is satisfied. If it is not, adjust RV12 (L-CH) and RV22 (R-CH), and repeat steps 1 and 2.

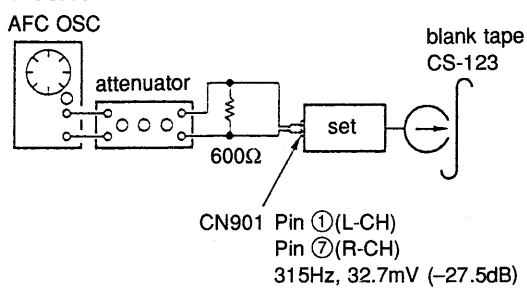
Adjustment Level: Playback output of 315 Hz to playback output of 10 kHz: –0.5 dB to 0.5 dB.

Adjustment Location: MD-B board

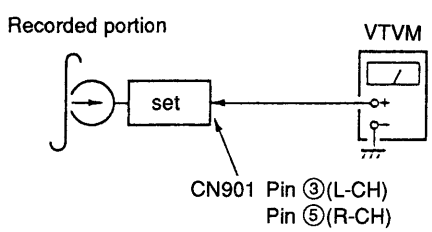
[Record Level Adjustment] Deck B

Procedure:

1. Record Mode



2. Playback Mode



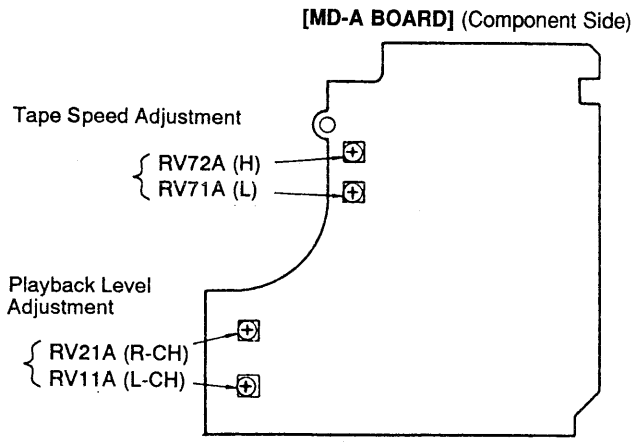
Playback the signal recorded at step 1, and check that the adjustment value specified below is satisfied. If it is not, adjust RV701 (L-CH) and RV801 (R-CH), and steps 1 and 2.

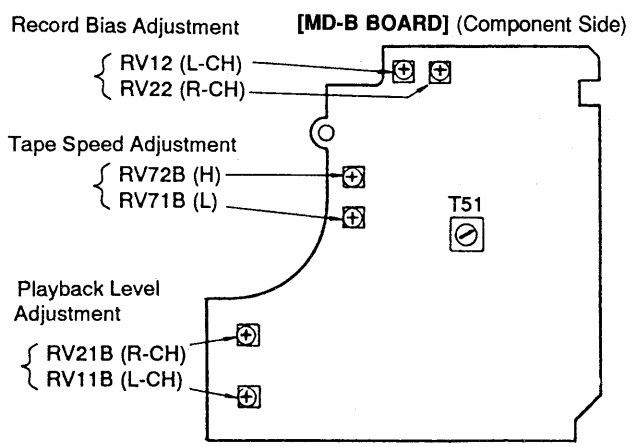
Adjustment Level:

CN901 level: –27.0 dB to –28.0 dB (31 to 35 mV)

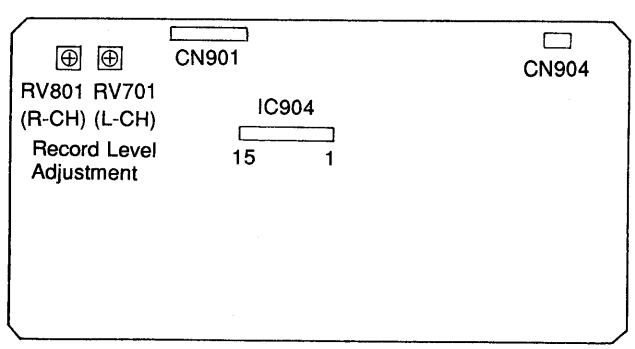
Adjustment Location: Main board

Adjustment Location:





[MAIN TC BOARD] (Component Side)

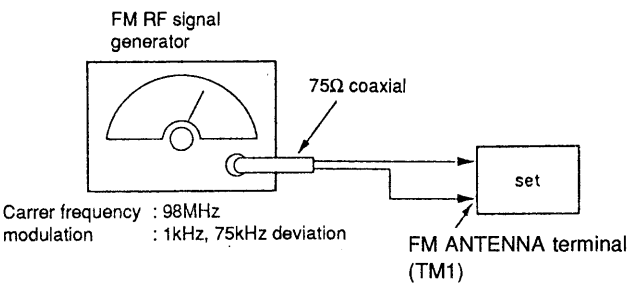


TUNER SECTION

Note : As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

FM SECTION ADJUSTMENTS

Setting:



FM Tuned Level Adjustment

Band : FM

Procedure :

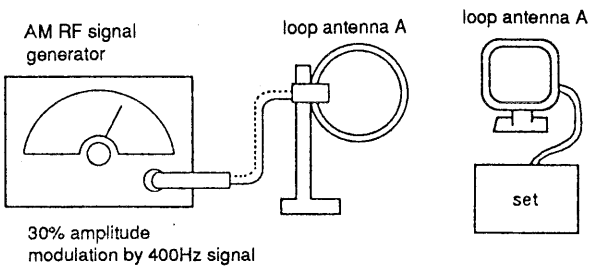
1. Supply a 30 ± 4dBμ 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV2 so that the TUNED indicator goes on.

Adjustment Location: MAIN board

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by trimmer capacitors.

AM SECTION ADJUSTMENTS

Setting:



AM Tuned Level Adjustment

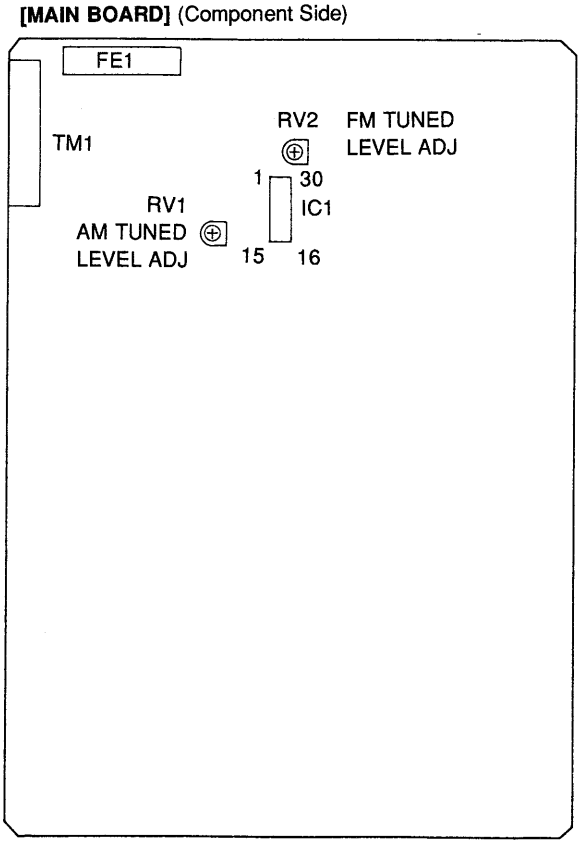
Band: AM

Procedure:

1. Set loop antenna input level to 94dBμ/m, 1050kHz and no signal tuned light should not on.
2. Ture the set to 1050kHz
3. Adjust RV1 so that the Voltage of IC1 ⑦ pin is set to low.

Adjustment Location : MAIN BOARD

[MAIN BOARD] (Component Side)

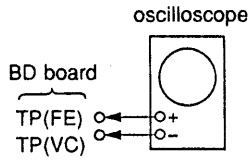


CD SECTION

Note :

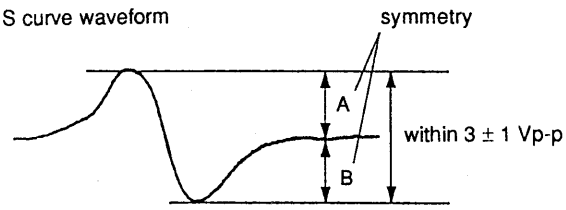
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal lever is low than specified value with the following checks.

S Curve Check



Procedure :

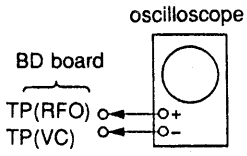
1. Connect oscilloscope to test point TP (FE) on BD board.
2. Connect between test point TP (FEI) and TP (VC) by lead wire.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3±1 Vp-p.



6. After check, remove the lead wire connected in step 2.

Note : • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

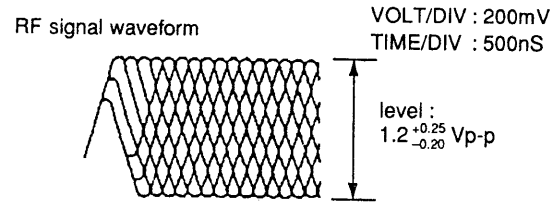


Procedure :

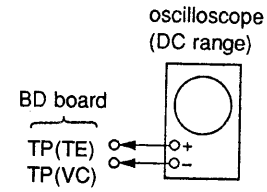
1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

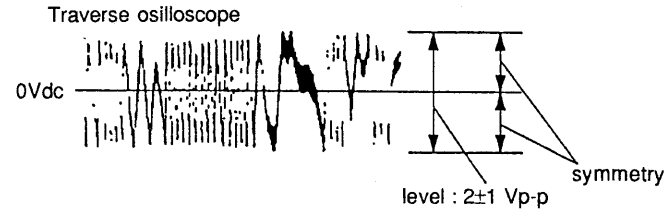


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) on CD MAIN board to ground and TP(TEI) to TP (VC) with lead wire.
2. Connect oscilloscpe to test point TP (TE) on BD board.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0Vdc, and check this level.

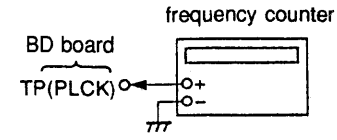


6. Remove the lead wire connected in step 1.

RF Free-run Frequency Check

Procedure :

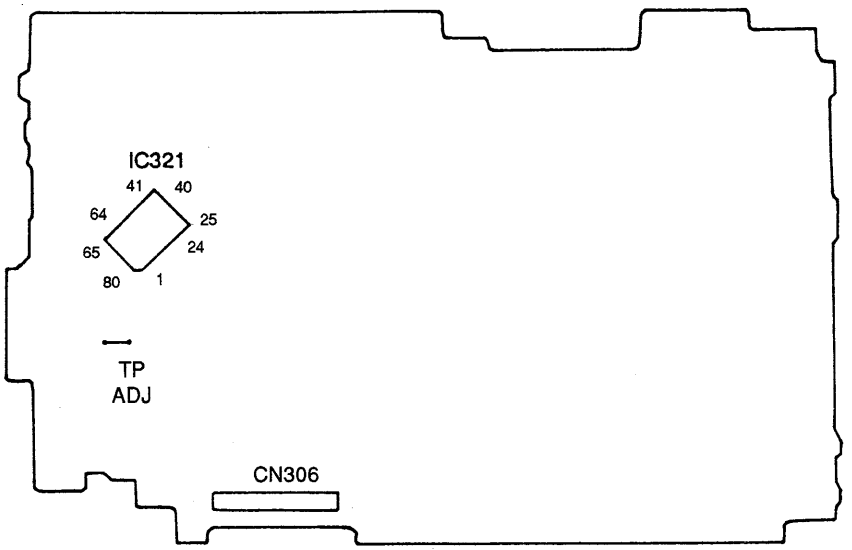
1. Connect frequency counter to test point (PLCK) with lead wire.



2. Turned Power switch on.
3. Confirm that reading on frequency counter is 4.3218MHz.

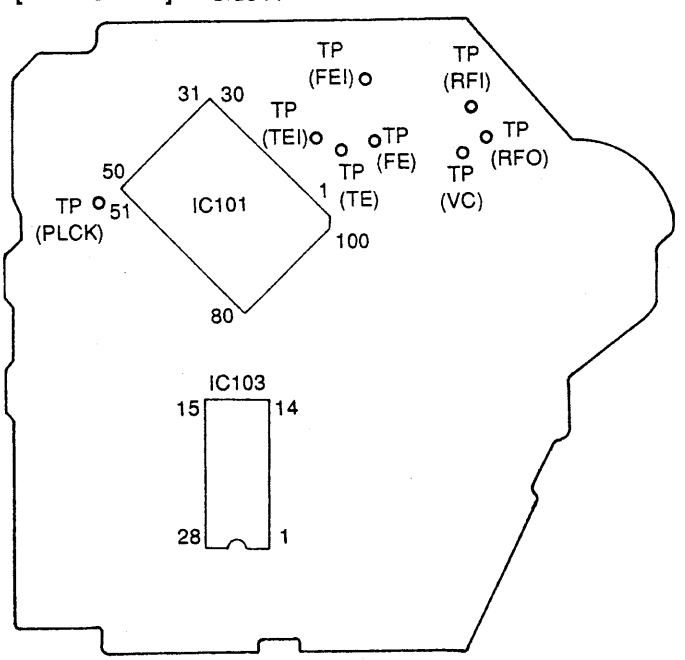
Adjustment Location :

[CD MAIN BOARD] (Component Side)



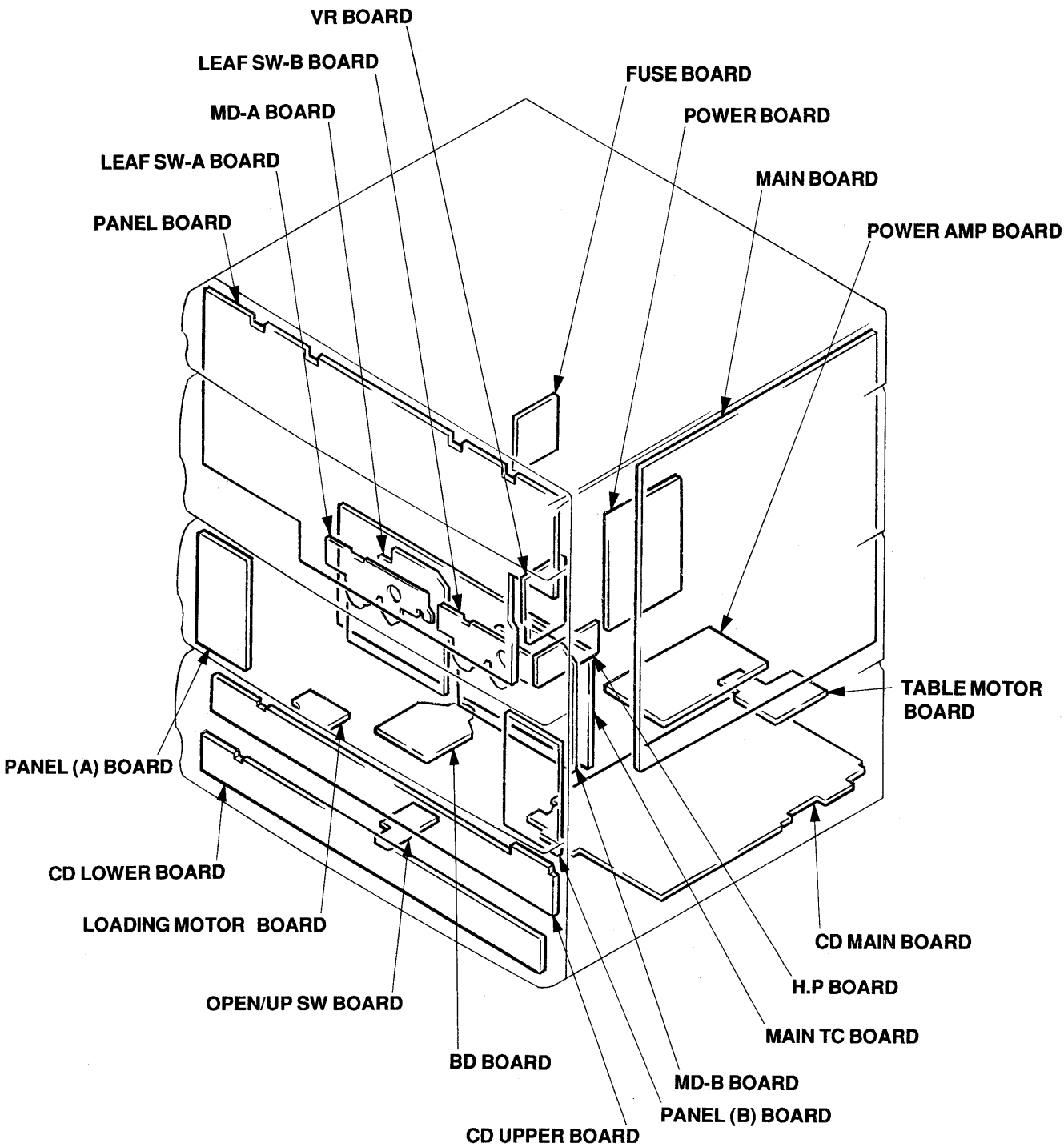
Adjustment Location :

[BD BOARD] — Side A —



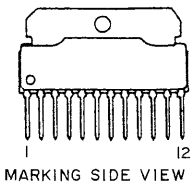
SECTION 6
DIAGRAMS

6-1. CIRCUIT BOARDS LOCATION

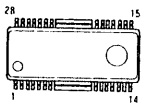


6-2. SEMICONDUCTOR LEAD LAYOUTS

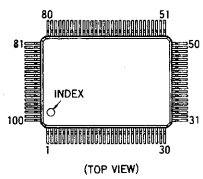
BA6191



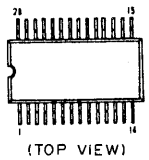
BA6392FP



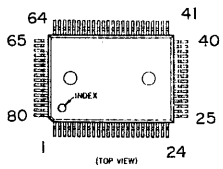
CXD2515Q



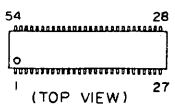
CXD2565AM



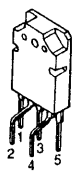
CXP82316-041Q
uPD78042GF056-3B9
uPD78043GF-079-3B9



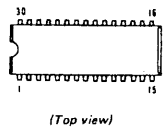
HA12171NT
M5289P



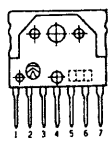
L78MR06
L78LR05D



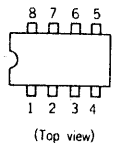
LA1835



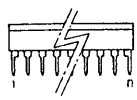
LA5602



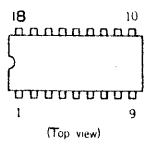
LB1639
M5218AP
UPC4558C



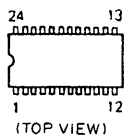
UPC1237HA



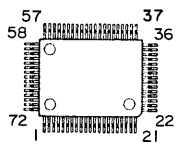
LC7073



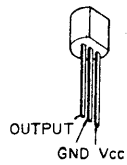
LC7218



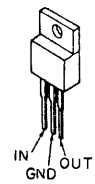
M50964-261FP



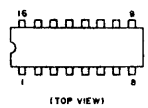
M51943BSL



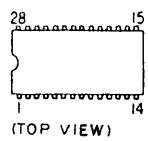
M5F7806L
M5F78M07L
M5F78M12
M5F79M07L



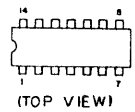
MC14052BCP
SAA6579
SN74HC139AN
UPD4053BC
XR1091DCP



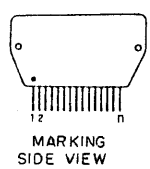
NJU7305L



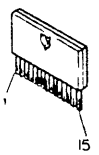
SN74HCU04AN



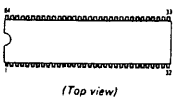
STK-4172MK2K
STK-4162MK2
STK-4182MK2



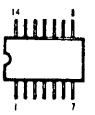
TA8242K



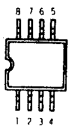
TMP47C1270AN-H227



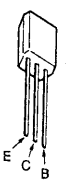
uPC1330GR



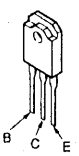
NJM4580E-D



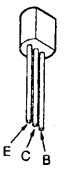
DTA144ES
DTA124ES
DTC144ES
DTC124ES
2SC2603-EF
2SC26690Y
2SC3622A-LK
2SC403SP-51



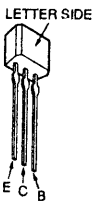
DTC114ES



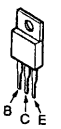
2SA1602-EF
2SB1013-34
2SC1841-PAFAEA
2SC3112-B



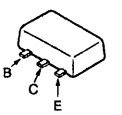
2SA1175-HFE



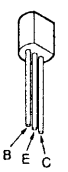
2SB1094-LK
2SD2012



2SC2001LK
2SD1616A-K

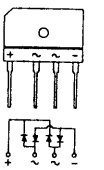


2SC3112-B

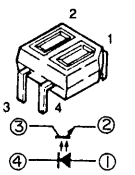


2SK246-GR3

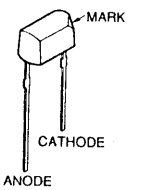
D5SBA20F01



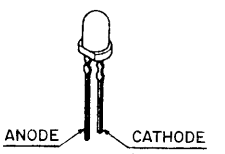
NJL5165K-B (H1)



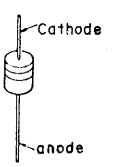
SEL5221S-TH8C
SEL5421E-TH8C



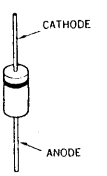
SEL5421E-TH8C
SEL5821A-TH8C



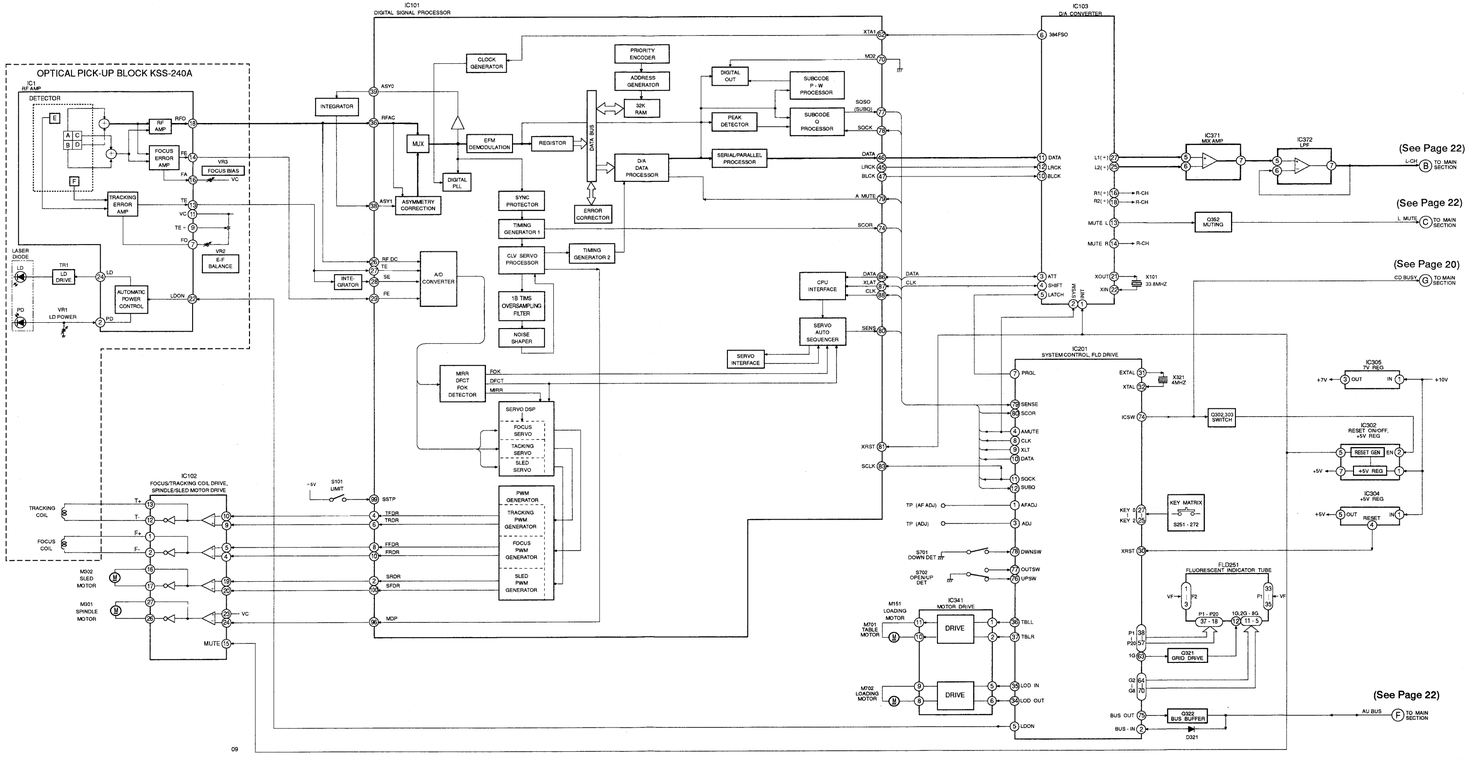
UZ-4.7BSB
UZ-5.6BSB
UZL-11M1
UZL-33L
UZP-5.6B



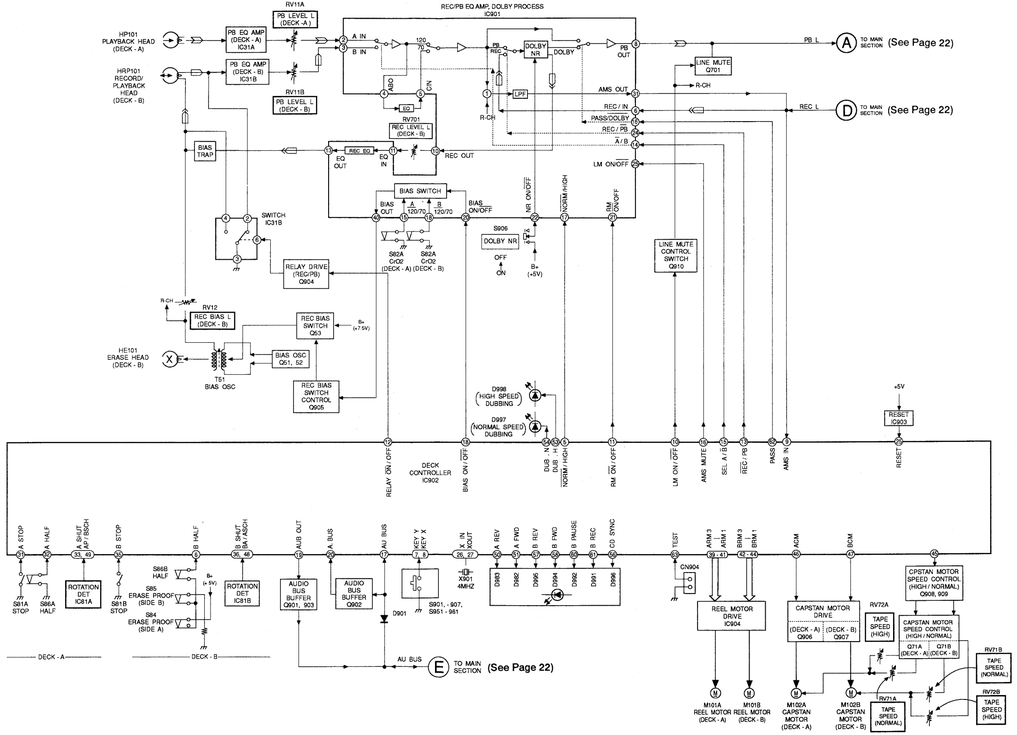
1N4148M
11EQS04
11ES2



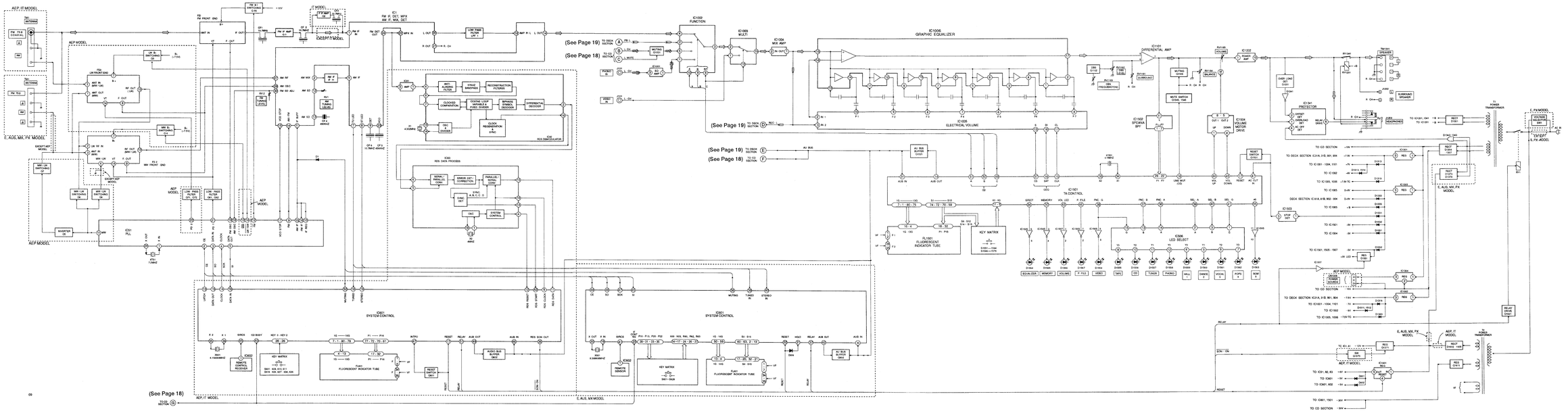
6-3. BLOCK DIAGRAMS — CD SECTION —



— DECK SECTION —



— MAIN SECTION —



6-4. SCHEMATIC DIAGRAM — TUNER SECTION —

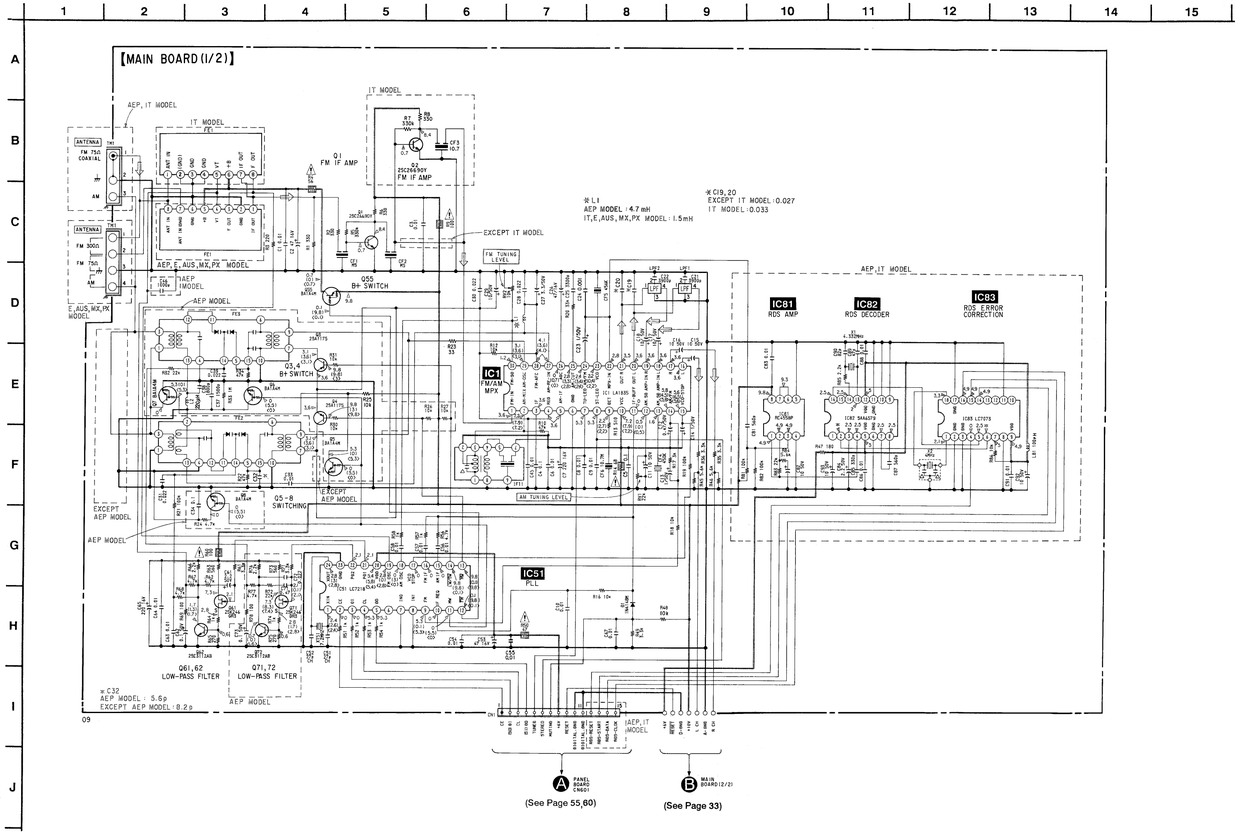
• Refer to page 29 for Printed Wiring Boards.

Note:

- All capacitors are in µF unless otherwise noted. pF:µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : nonflammable resistor.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- ▭▭▭ : B+ Line
- ▭▭▭ : B– Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
  ( ) : MW
  < > : LW
  ☆ : can not be measured.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- IT : Italian model.
  MX : Mexican model.
  AUS : Australian model.

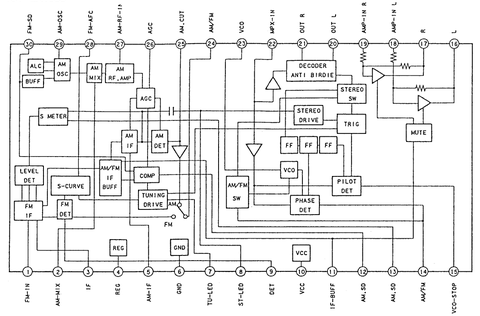


— 25 —

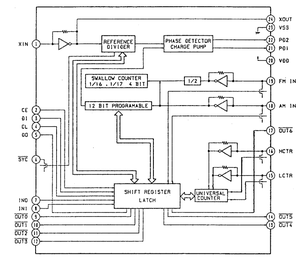
— 26 —

• IC Block Diagrams.

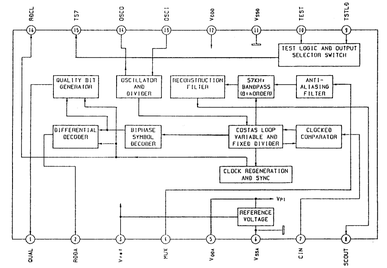
IC1 LA1835



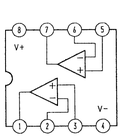
IC51 LC7218



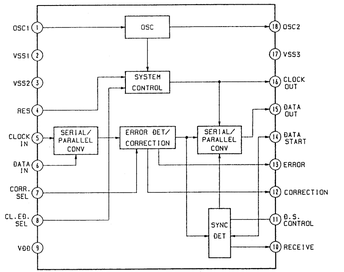
IC82 SAA6579



IC81 RC4558P



IC83 LC7073

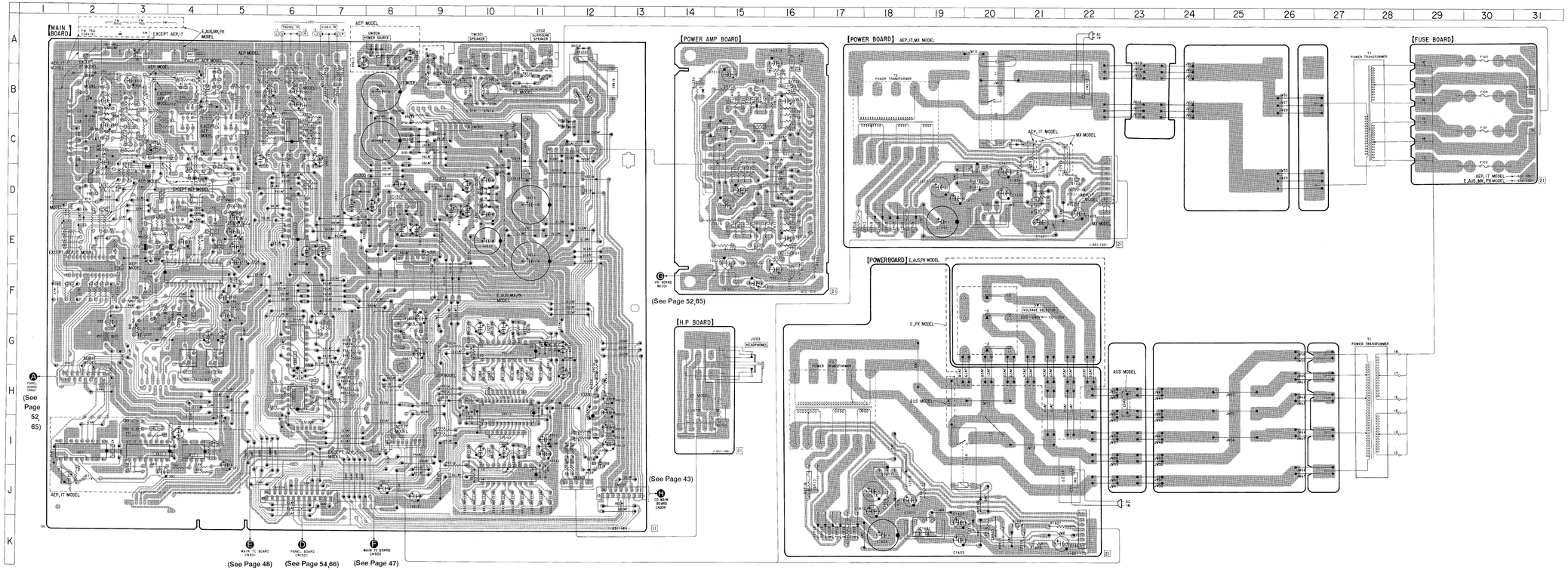


— 27 —

— 28 —

6-5. PRINTED WIRING BOARDS — MAIN SECTION —

- See page 13 for Circuit Boards Location.
- See pages 14, 15 for Semiconductor Lead Layouts.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D1	D-2	● D1612	D-20
D1201	E-16	○ D1612	J-18
D1202	B-14	● D1613	E-19
D1203	A-12	○ D1613	K-17
D1251	B-15		
D1301	C-11	IC1	F-4
D1304	C-9	IC51	F-2
D1305	C-8	IC81	I-4
D1306	C-8	IC82	I-3
D1307	C-8	IC83	I-2
D1313	E-7	IC1001	C-6
D1314	E-8	IC1002	E-6
D1315	E-8	IC1003	G-6
D1316	D-7	IC1004	H-6
D1317	D-9	IC1005	H-10
D1318	E-9	IC1006	J-10
D1319	F-9	IC1056	G-10
D1320	F-9	IC1201	B-17
D1321	D-12	IC1301	D-8
D1322	D-11	IC1302	D-9
D1323	D-11	IC1303	D-7
D1324	D-12	IC1304	A-8
D1325	D-11	IC1341	H-12
D1326	C-11	● IC1601	D-20
D1331	D-7	○ IC1601	K-19
D1333	E-8		
D1335	H-9	Q1	E-3
D1336	H-10	Q2	E-3
D1337	D-8	Q3	D-4
D1341	J-12	Q4	D-4
D1342	C-12	Q5	B-4
D1343	C-12	Q6	B-4
D1371	D-10	Q7	B-4
D1372	D-10	Q8	B-4
D1373	D-10	Q55	D-2
D1374	D-10	Q61	C-2
D1375	F-9	Q62	B-2
● D1601	D-21	Q71	C-3
○ D1601	K-20	Q72	B-3
● D1602	E-18	Q1031	G-7
○ D1602	K-17	Q1081	H-7
● D1603	E-18	Q1201	E-15
○ D1603	K-17	Q1251	B-15
● D1604	E-18	Q1341	I-12
○ D1604	K-17	Q1370	G-9
● D1605	E-18	Q1371	G-8
○ D1605	K-17	● Q1611	D-20
● D1606	C-21	○ Q1611	J-18
○ D1606	J-20	● Q1621	D-22
● D1611	D-21	○ Q1621	K-21
○ D1611	J-18		

Note : Power board
- ● : AEP, IT, MX MODEL
- ○ : E, AUS, PX MODEL

Note:
- ⟂ : parts extracted from the component side.
- ▨ : Pattern from the side which enable seeing.
- IT : Italian model.
- MX : Mexican model.
- AUS : Australian model.

【MAIN BOARD(2/2)】

【POWER AMP BOARD】

【H.P BOARD】

【FUSE BOARD】

【POWER BOARD】

IC1001 PHONO EQ AMP

IC1002 FUNCTION SWITCH

IC1003 MULTI SWITCH

IC1004 MIX AMP

IC1005 ELECTRICAL VOLUME

IC1006 GRAPHIC EQUALIZER (L-CH)

IC1056 GRAPHIC EQUALIZER (R-CH)

IC1201 POWER AMP

IC1301 +7V REG

IC1302 -7V REG

IC1303 +6V REG

IC1304 +10V REG

IC1341 PROTECTOR

IC1601 +6V REG

Q1201,1251 PROTECT

Q1341 PROTECTOR

Q1371 +10V REG

Q1370 EON SWITCH

Q1301,1081 MUTING

Q1621 RELAY DRIVE

Q1611 -30V REG

IC1002 MC14052BCP

CTL	0	1	2	3	4
A	L	H	L	H	*
B	L	L	H	H	*
INH	L	L	L	L	H
PHON	CD	TC	ST	VIDEO	

IC1003 MC14053BCP

Z	MULTI	X/Y	OUT
1	OFF	1	VIDEO
0	ON	0	Other VIDEO

*	AEP,IT MODEL	E,AUS,MX,PX MODEL
R1205-1208	4.7k	6.8k
R1255-1258	4.7k	6.8k

※C1003,1053
IT MODEL : 220p
EXCEPT MODEL : 100p

※IC1201 AEP,IT MODEL : STK4162MK2
MX MODEL : STK4172MK2
E,AUS,PX MODEL : STK4182MK2

※RI230
AEP,IT,MX MODEL : 10k
E,AUS,PX MODEL : 4.7k

※RI380
AEP,IT,MX MODEL : 680 2W
E,AUS,PX MODEL : 820 2W

(See Page 26)

(See Page 51)

(See Page 51)

(See Page 39)

(See Page 57, 62)

(See Page 59, 64)

• IC Block Diagrams.

IC1005 NJU7305L

IC1341 μPC1237HA

IC1601 L78MR06

IC1006, 1056 M5289P

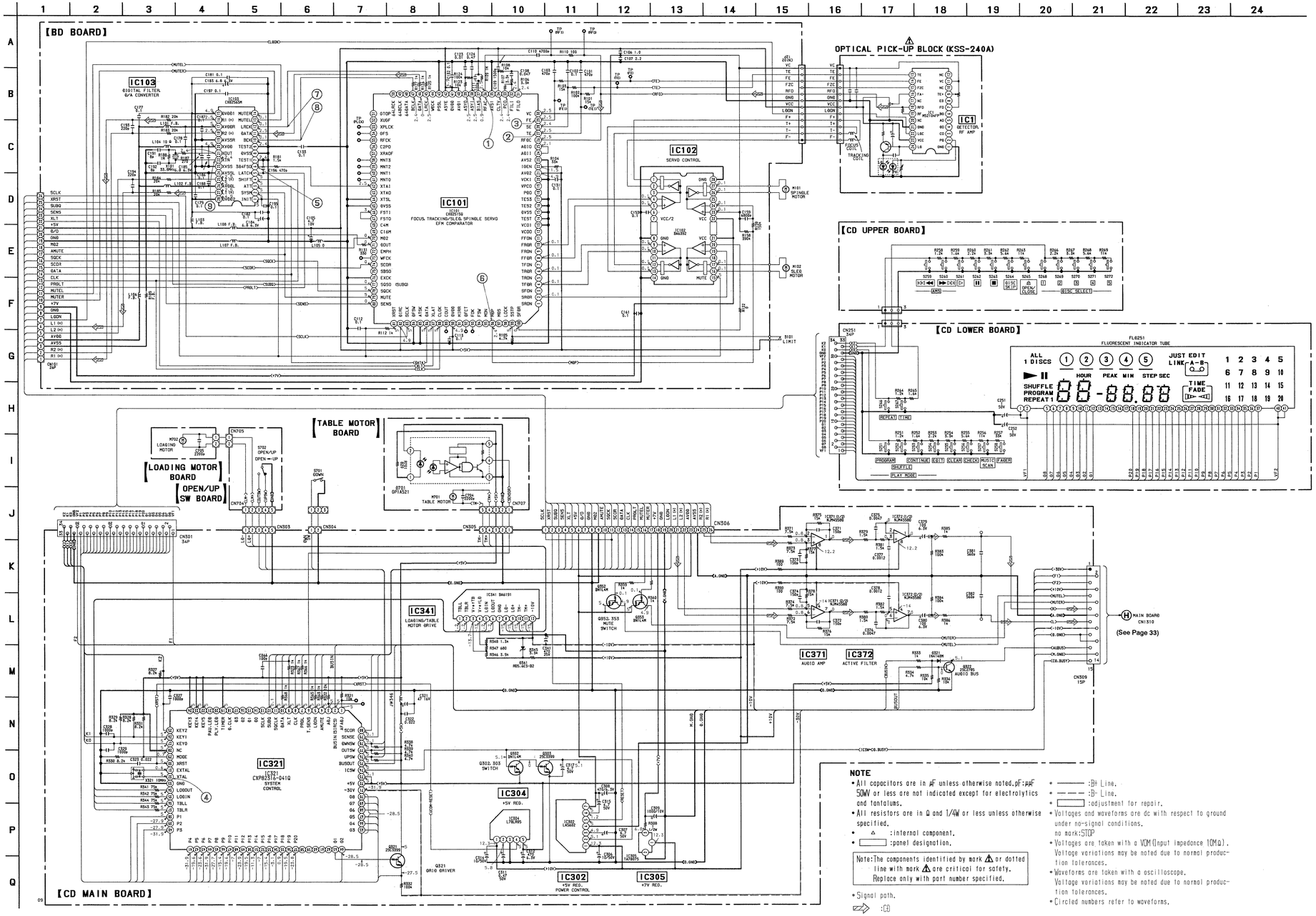
Note:
- All capacitors are in μF unless otherwise noted. pF:μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▬ : nonflammable resistor.
- ▬ : fusible resistor.
- ▭ : panel designation.

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

- ▬▬ : B+ Line
- ▬▬ : B- Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark : FM ※ : can not be measured.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. ⇨ : FM ⇨ : PB ⇨ : REC ⇨ : CD ⇨ : PHONO
- IT : Italian model. MX : Mexican model. AUS : Australian model.

6-7. SCHEMATIC DIAGRAM — CD SECTION —

• See pages 68 to 71 for IC Pin Functions. (IC101, IC103, IC321)



NOTE

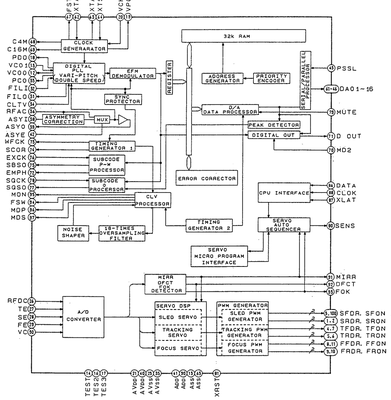
- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

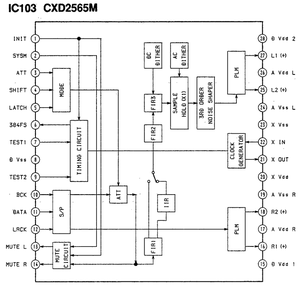
- Signal path.
  ⇨ : CD
- ——— : B+ Line.
- – – – : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: STOP
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

• IC Block Diagrams.

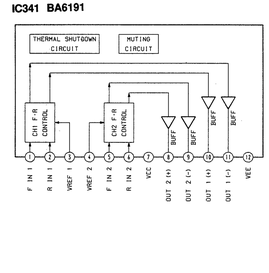
IC101 CXD2515Q



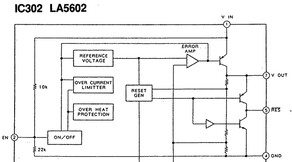
IC103 CXD2565M



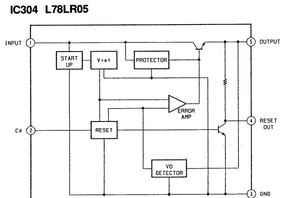
IC341 BA6191



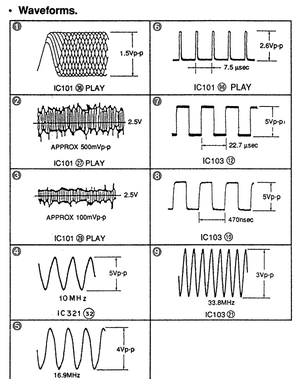
IC302 LA5602



IC304 L78LR05

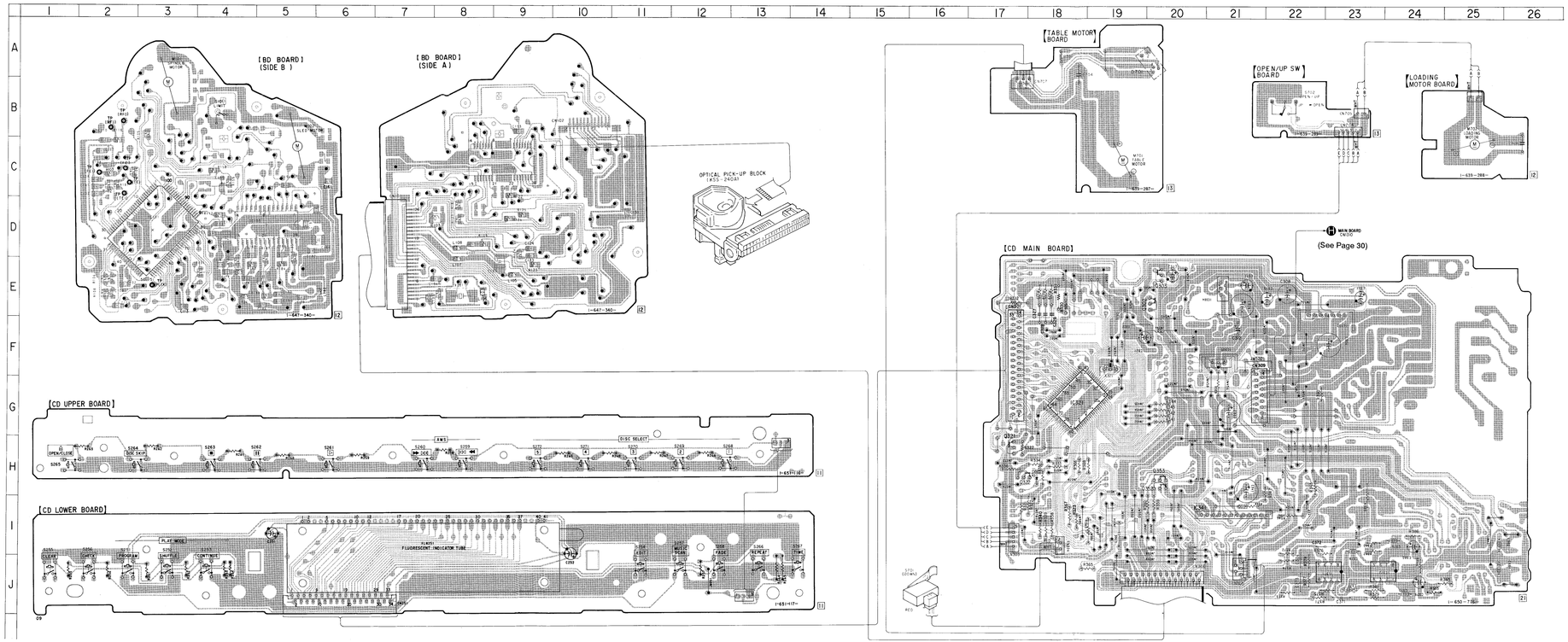


• Waveforms.



6-8. PRINTED WIRING BOARDS — CD SECTION —

- See page 13 for Circuit Boards Location.
- See pages 14, 15 for Semiconductor Lead Layouts.



- **Semiconductor Location**

Ref. No.	Location
D321	H-18
D341	I-22
D701	A-19
IC101	D-3
IC102	C-9
IC103	D-5
IC302	F-23
IC304	E-21
IC305	F-21
IC321	G-18
IC341	I-21
IC371	J-23
IC372	J-24
Q302	E-20
Q303	E-20
Q321	H-17
Q322	H-18
Q352	H-20
Q353	H-20

Note:

- ⟵ : parts extracted from the component side.
- △ : internal component.
- ● : Through hole.
- ▨ : Pattern from the side which enable seeing. (The other layer's patterns are not indicated.)

6-9. PRINTED WIRING BOARDS — DECK SECTION —

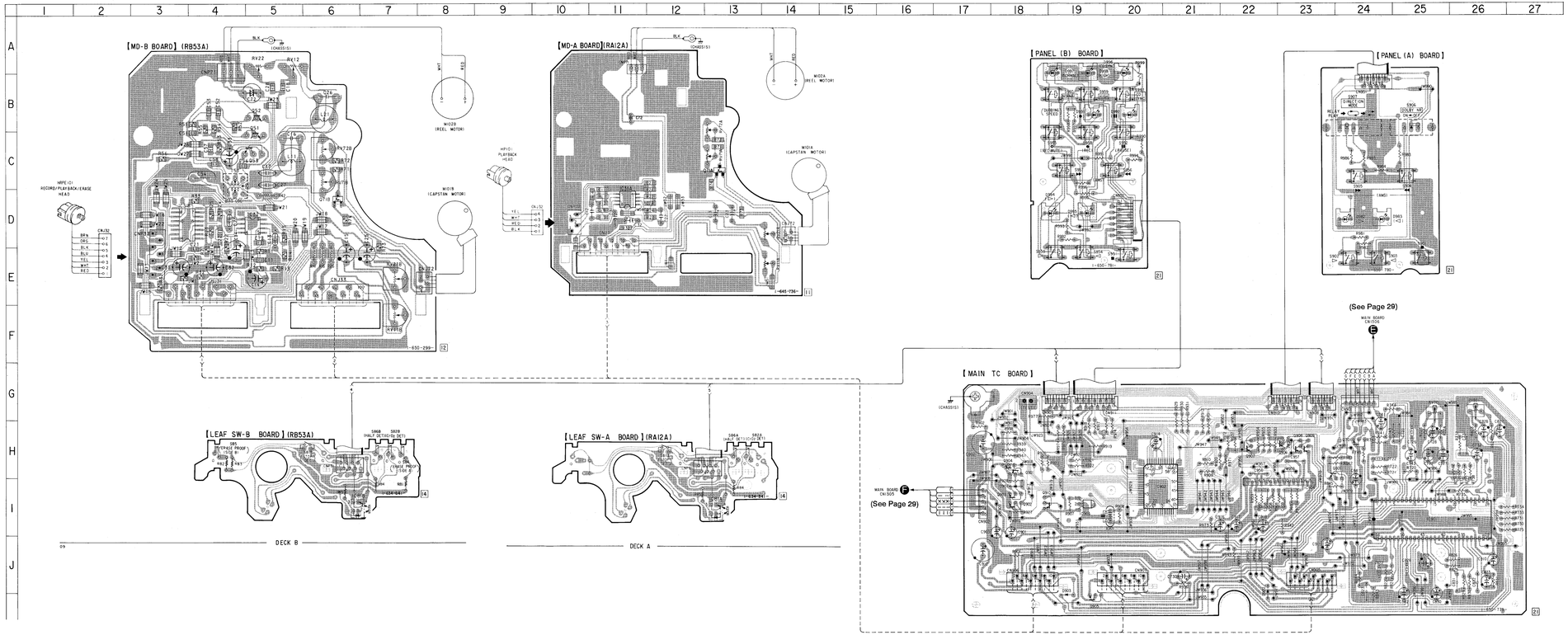
- See page 13 for Circuit Boards Location.
- See pages 14, 15 for Semiconductor Lead Layouts.

- **Semiconductor Location**

Ref. No.	Location
D901	I-18
D902	K-22
D903	K-19
D982	D-24
D983	D-24
D991	B-19
D992	B-20
D994	D-19
D995	D-19
D997	B-19
D998	B-19
IC31A	D-11
IC31B	C-3
IC32	D-5
IC81A	I-13
IC81B	I-6
IC901	I-25
IC902	I-20
IC903	I-19
IC904	I-23
Q51	C-5
Q52	B-5
Q53	C-5
Q71A	C-13
Q71B	D-6
Q701	H-24
Q801	H-23
Q901	H-18
Q902	I-18
Q903	I-18
Q904	H-18
Q905	K-19
Q906	H-22
Q907	H-22
Q908	H-23
Q909	H-23
Q910	I-18

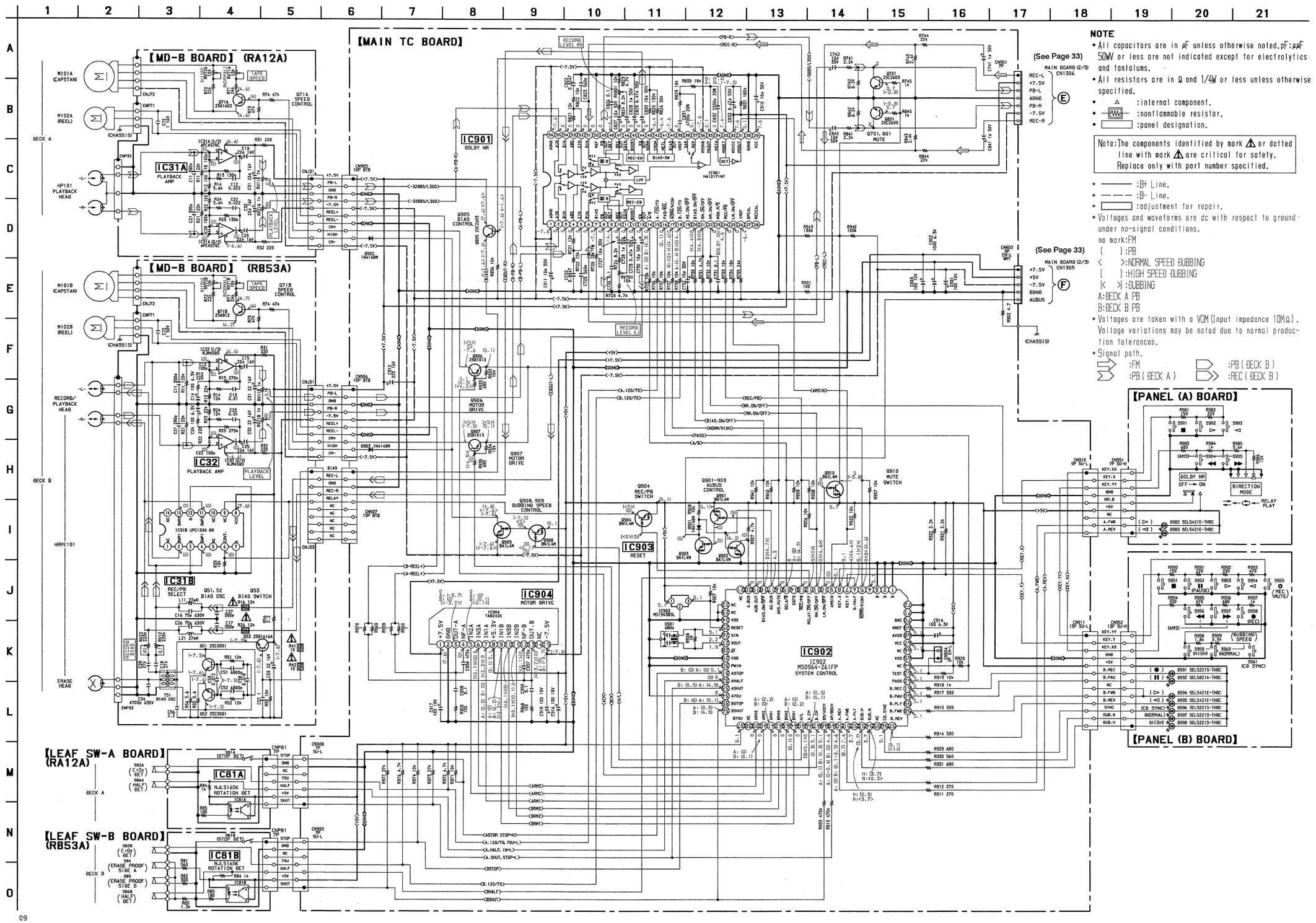
Note:

- o—— : parts extracted from the component side.
- : indicates side identified with part number.
- : Pattern from the side which enable seeing.



6-10. SCHEMATIC DIAGRAM — DECK SECTION —

• See pages for 76, 77 IC Pin Functions. (IC902)

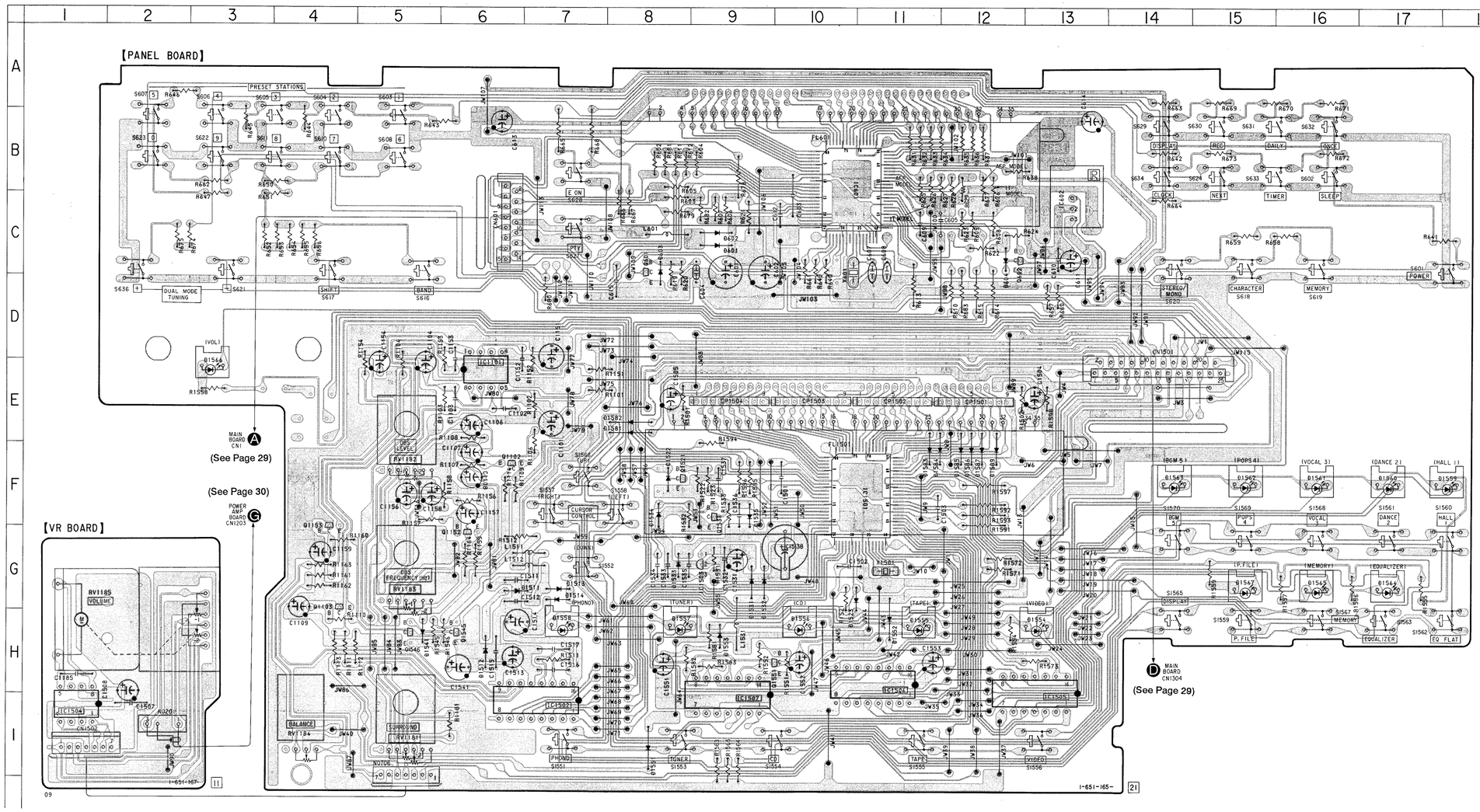

【MD-B BOARD】 (RA12A)
【MD-B BOARD】 (RB53A)
【MAIN TC BOARD】
【LEAF SW-A BOARD】 (RA12A)
【LEAF SW-B BOARD】 (RB53A)
【PANEL (A) BOARD】
【PANEL (B) BOARD】
IC31A PLAYBACK AMP
IC31B REC/PB SELECT
IC32 PLAYBACK AMP
IC81A ROTATION DET
IC81B ROTATION DET
IC901 DOLBY NR
IC902 M50964-261FP SYSTEM CONTROL
IC903 RESET
IC904 MOTOR DRIVE
Q71A SPEED CONTROL
Q71B SPEED CONTROL
Q904 REC/PB SWITCH
Q910 MUTE SWITCH
Q901-903 AUBUS CONTROL
Q908, 909 DUBBING SPEED CONTROL
Q906 MOTOR DRIVE
Q907 MOTOR DRIVE
Q905 BIAS CONTROL
Q51, 52 BIAS OSC
Q53 BIAS SWITCH
Q701, 801 MUTE
HP101 PLAYBACK HEAD
RECORD/ PLAYBACK HEAD
ERASE HEAD
M101A (CAPSTAN)
M102A (REEL)
M101B (CAPSTAN)
M102B (REEL)
DECK A
DECK B
HRPE101
RECORD LEVEL (R)
RECORD LEVEL (L)
PLAYBACK LEVEL
TAPE SPEED
(See Page 33)
MAIN BOARD (2/3) CN1306
MAIN BOARD (2/3) CN1305
REC-L
+7.5V
PB-L
AGND
PB-R
-7.5V
REC-R
+7.5V
+5V
-7.5V
DGND
AUBUS
DOLBY NR OFF → ON
DIRECTION MODE
RELAY PLAY
(DUBBING SPEED)
(NORMAL)
(2 SYNC)
(REC)
(REC MUTE)
(PAUSE)
(AMS)
CHASSIS
CN902 FFC 8P
CN903 FFC 13P
CN904 FFC 15P
CN905 FFC 15P
CN906 FFC 15P
CN907 FFC 15P
CN908 FFC 7P
CN909 FFC 7P
CN910 FFC 5P
CN951 FFC 7P
CN952 FFC 7P
CN953 FFC 13P
CN954 FFC 15P
CNP32
CNP81
CNJ31
CNJ33
CN901 2P
CN902 8P
CN903 13P
CN904 15P
CN905 15P
CN906 15P
CN907 15P
CN908 7P
CN909 7P
CN910 5P
CN951 7P
CN952 7P
CN953 13P
CN954 15P
IC31A (1/2) NJM4558
IC31B UPC1330 GR
IC32 (1/2) NJM4580
IC904 TA8242K
X901 4MHz
S901 S902 S903
S951 S952 S953 S954 S955
S981 S982 S983 S984 S985 S986
S991 S992 S993 S994 S995 S996 S997 S998 S999
S959 S960
SEL5421E-THBC
SEL5221S-THBC
SEL5821A-THBC
(REC SYNC)
(NORMAL)
(DUBBING SPEED)
(REC)
(REC MUTE)
(PAUSE)
(AMS)
(CD SYNC)
(DOLBY NR)
(DIRECTION MODE)
(RELAY PLAY)
(DUBBING SPEED)
(NORMAL)
(CD SYNC)
(REC)
(REC MUTE)
(PAUSE)
(AMS

6-11. PRINTED WIRING BOARDS — PANEL (AEP, IT MODEL) SECTION —

- See page 13 for Circuit Boards Location.
- See pages 14, 15 for Semiconductor Lead Layouts.

- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D601	C-9	D1567	G-15
D602	C-9	D1581	E-8
D603	C-8	D1582	E-8
D604	C-12	D1583	F-11
D1511	G-6	D1584	F-11
D1512	H-6	D1585	F-12
D1513	G-7	D1586	F-12
D1514	G-7	D1587	F-12
D1522	F-8	D1589	F-12
D1523	G-10		
D1531	G-9	IC601	B-10
D1532	G-9	IC602	C-13
D1533	G-8	IC1101	E-6
D1534	F-8	IC1501	F-11
D1535	F-9	IC1502	I-7
D1541	H-5	IC1503	G-9
D1551	I-8	IC1504	I-1
D1552	H-11	IC1505	I-13
D1553	H-9	IC1506	H-11
D1554	H-13	IC1507	I-9
D1555	H-11		
D1556	H-10	Q601	C-8
D1557	H-8	Q602	C-12
D1558	H-7	Q1102	F-6
D1559	F-18	Q1103	G-4
D1560	F-17	Q1152	G-6
D1561	F-16	Q1153	G-4
D1562	F-15	Q1521	F-8
D1563	F-14	Q1531	F-9
D1564	G-17	Q1545	H-6
D1565	G-16	Q1546	H-5
D1566	E-3	Q1551	H-10

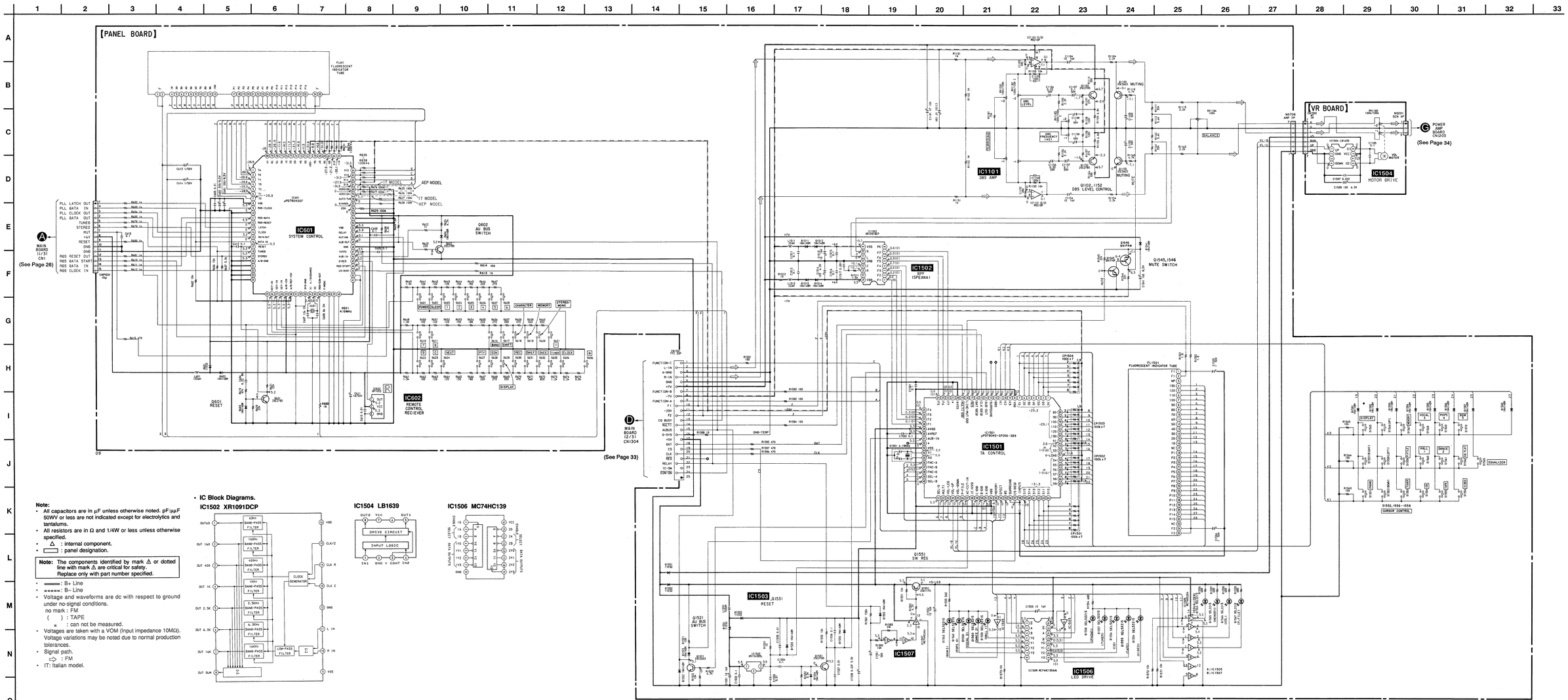


Note:

- ○—— : parts extracted from the component side.
- ▭ : Pattern from the side which enable seeing.
- IT : Italian model.

6-12. SCHEMATIC DIAGRAM — PANEL (AEP, IT MODEL) SECTION —

• See pages 72, 73 and 78, 79 for IC Pin Functions. (IC601, IC1501)



Note:

- All capacitors are in µF unless otherwise noted. pF:µµF 50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

- ▬▬ : B+ Line
- ▬▬ : B– Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
  ( ) : TAPE
  * : can not be measured.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- IT: Italian model.

• **IC Block Diagrams.**

IC1502 XR1091DCP

IC1504 LB1639

IC1506 MC74HC139

6-13. SCHEMATIC DIAGRAM
— PANEL (E, AUS, MX, PX MODEL) SECTION —
• See pages 74, 75 and 78, 79 for IC Pin Functions. (IC601, IC1501)

【PANEL BOARD】

【VR BOARD】

IC601 DISPLAY CONTROL

IC602 REMOTE SENSOR

IC1501 TA CONTROL

IC1502 BPF (SPECANA)

IC1503 Q1531 RESET

IC1504 MOTOR DRIVE

IC1506 LED DRIVE

IC1507

G1101 DBS AMP

Q1102, 1152 DBS LEVEL CONTROL

Q1545, 1546 MUTE SWITCH

Q1551 SW REG

Q1521 AU BUS SWITCH

(See Page 26)

(See Page 33)

(See Page 34)

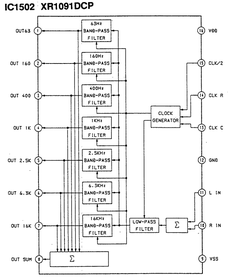
Note:
- All capacitors are in μF unless otherwise noted. pF:μμF 50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

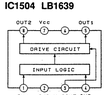
- ——— : B+ Line
- ▪▪▪▪▪ : B– Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
  ( ) : TAPE
  : can not be measured.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- MX : Mexican model.
  AUS : Australian model.

• **IC Block Diagrams.**

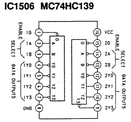
IC1502 XR1091DCP



IC1504 LB1639

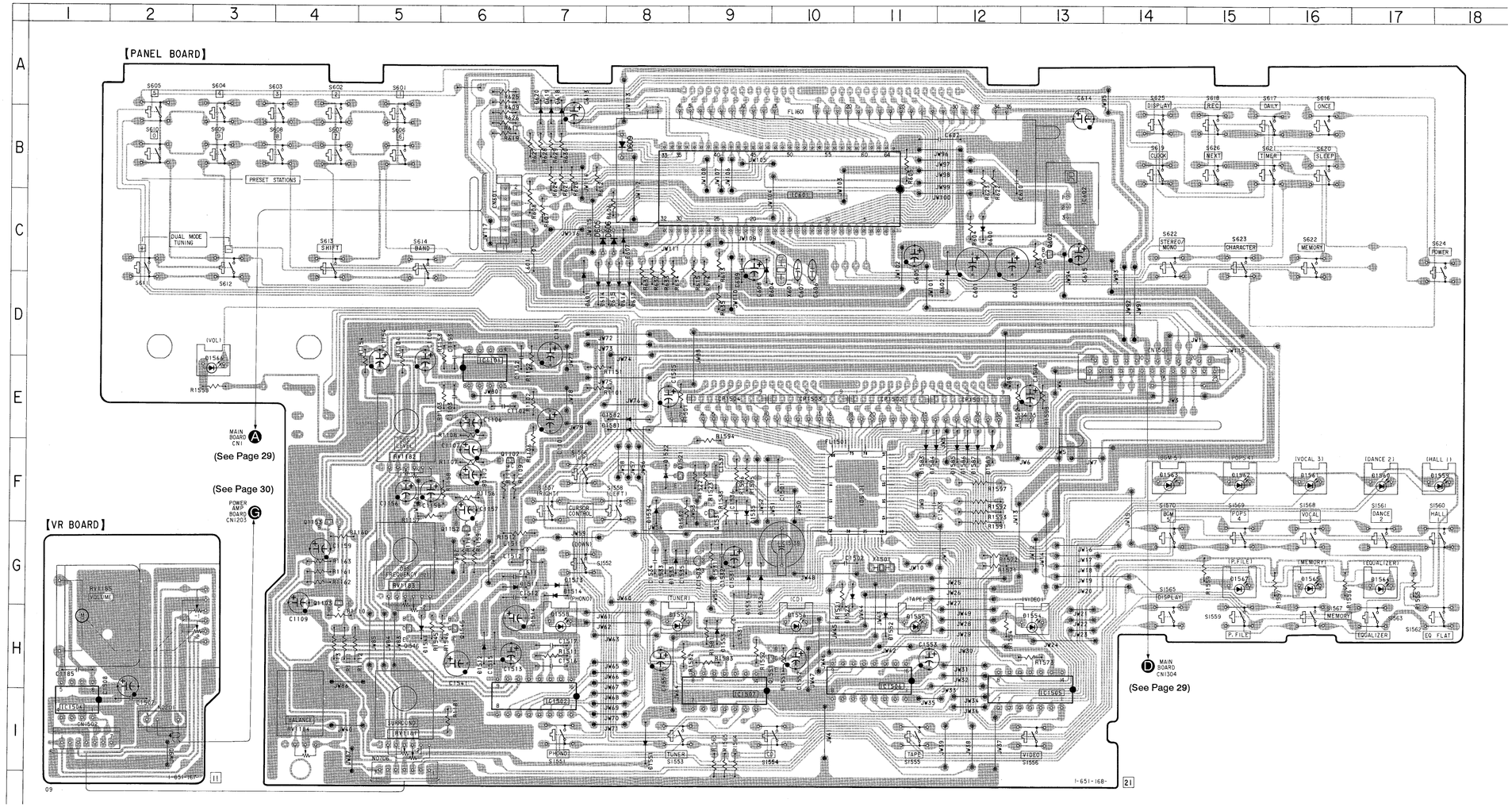


IC1506 MC74HC139



6-14. PRINTED WIRING BOARDS
— PANEL (E, AUS, MX, PX MODEL) SECTION —

• See page 13 for Circuit Boards Location.
• See pages 14, 15 for Semiconductor Lead Layouts.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D600	C-12	D1561	F-16
D601	D-7	D1562	F-15
D602	D-12	D1563	F-14
D604	D-9	D1564	G-17
D605	C-7	D1565	G-16
D606	C-8	D1566	E-3
D607	C-8	D1567	G-15
D609	B-8	D1581	E-8
D614	D-7	D1582	E-8
D615	D-8	D1583	F-11
D616	D-8	D1584	F-11
D617	D-8	D1585	F-12
D618	A-7	D1586	F-12
D619	A-7	D1587	F-12
D620	A-7	D1589	F-12
D1511	G-6		
D1512	H-6	IC601	C-10
D1513	G-7	IC602	C-13
D1514	G-7	IC1101	E-6
D1522	F-8	IC1501	F-11
D1523	G-10	IC1502	I-7
D1531	G-9	IC1503	G-9
D1532	G-9	IC1504	I-1
D1533	G-8	IC1505	I-13
D1534	F-8	IC1506	H-11
D1535	F-9	IC1507	I-9
D1541	H-5		
D1551	I-8	Q602	C-13
D1552	H-11	Q1102	F-6
D1553	H-9	Q1103	G-4
D1554	H-13	Q1152	G-6
D1555	H-11	Q1153	G-4
D1556	H-10	Q1521	F-8
D1557	H-8	Q1531	F-9
D1558	H-7	Q1545	H-6
D1559	F-18	Q1546	H-5
D1560	F-17	Q1551	H-10

Note:
- ○—— : parts extracted from the component side.
- ▨▨ : Pattern from the side which enable seeing.

MX : Mexican model.
AUS : Australian model.

6-15. IC PIN FUNCTIONS

- **IC101 (CXD2515Q)**

Pin No.	Pin Name	I/O	Function
1	SRON	O	Sled drive output
2	SRDR	O	Sled drive output
3	SFON	O	Sled drive output
4	TFDR	O	Tracking drive output
5	TRON	O	Tracking drive output
6	TRDR	O	Tracking drive output
7	TFON	O	Tracking drive output
8	FFDR	O	Focus drive output
9	FRON	O	Focus drive output
10	FRDR	O	Focus drive output
11	FFON	O	Focus drive output
12	VCOO	O	VCO output for analog EFM PLL
13	VCOI	I	VCO output for analog EFM PLL
14	TEST	I	TEST pin connected normally to GND
15	DVss	–	Digital GND
16	TES2	I	TEST pin connected normally to GND
17	TES3	I	TEST pin connected normally to GND
18	PDO	O	Charge-pump output for analog EFM PLL
19	VPCO	O	Charge-pump output for variable pitch PLL
20	VCKI	I	Clock input from variable pitch external VCO
21	AVD2	–	Analog power supply
22	IGEN	I	Power supply pin for operational amplifiers
23	AVS2	–	Analog GND
24	ADII	I	Input pin for A/D converter
25	ADIO	O	Operational amplifier output pin
26	RFDC	I	RF signal input
27	TE	I	Tracking error signal input
28	SE	I	Sled error signal input
29	FE	I	Focus error signal input
30	VC	I	Center voltage input pin
31	FILO	O	Filter output for master PLL
32	FILI	I	Filter input for master PLL
33	PCO	O	Charge-pump output for master PLL
34	CLTV	I	Control voltage input for master VCO
35	AVS1	–	Analog GND
36	RFAC	I	EFM signal input
37	BIAS	I	Asymmetry circuit constant current input
38	ASYI	I	Asymmetry comparate voltage input
39	ASYO	O	EFM full swing output
40	AVD1	–	Analog power supply

Pin No.	Pin Name	I/O	Function
41	DVDD	–	Digital power supply
42	ASYE	I	Asymmetry circuit ON/OFF
43	PSSL	I	Audio data output mode selection input
44	WDCK	O	48-bit slot D/A interface. Word clock
45	LRCK	O	48-bit slot D/A interface. LR clock
46	DATA	O	DA 16 output when PSSL=1. 48-bit slot serial data when PSSL=0
47	BCLK	O	DA 15 output when PSSL=1. 48-bit slot data when PSSL=0
48	64DATA	O	DA 14 output when PSSL=1. 64-bit slot data when PSSL=0
49	64BCLK	O	DA 13 output when PSSL=1. 64-bit slot data when PSSL=0
50	64LRCK	O	DA 12 output when PSSL=1. 64-bit slot data when PSSL=0
51	GTOP	O	DA 11 output when PSSL=1. GTOP output when PSSL=0
52	XUGF	O	DA 10 output when PSSL=1. XUGF output when PSSL=0
53	XPLCK	O	DA 09 output when PSSL=1. XPLCK output when PSSL=0
54	GFS	O	DA 08 output when PSSL=1. GFS output when PSSL=0
55	PFCK	O	DA 07 output when PSSL=1. RFCK output when PSSL=0
56	C2PO	O	DA 06 output when PSSL=1. C2PO output when PSSL=0
57	XRAOF	O	DA 05 output when PSSL=1. XRA0F output when PSSL=0
58	MNT3	O	DA 04 output when PSSL=1. MNT3 output when PSSL=0
59	MNT2	O	DA 03 output when PSSL=1. MNT2 output when PSSL=0
60	MNT1	O	DA 02 output when PSSL=1. MNT1 output when PSSL=0
61	MNT0	O	DA 01 output when PSSL=1. MNT0 output when PSSL=0
62	XTAI	I	X'tal oscillator circuit input
63	XTAO	O	X'tal oscillator circuit output
64	XTSL	I	X'tal selection input pin
65	DVss	–	Digital GND
66	FSTI	I	2/3 divider output of pins 62, 63
67	FSTO	O	2/3 divider output of pins 62, 63
68	C4M	O	4.2336 MHz output
69	C16M	O	16.9344 MHz output
70	MD2	I	Digital-out ON/OFF control pin
71	DOUT	O	Digital-out output pin
72	EMPH	O	Playback disc output in emphasis mode
73	WFCK	O	WFCK output
74	SCOR	O	Sub-code sync output
75	SBSO	O	Sub-P through Sub-W serial output
76	EXCK	I	Clock input for SBS0 read-out
77	SUBQ	O	Sub-Q 80-bit output
78	SQCK	I	Clock input for SQS0 read-out
79	MUTE	I	Muting selection pin
80	SENS	O	SENS output
81	XRST	I	System reset
82	DIRC	I	Used in 1-track jump mode
83	SCLK	I	SENS serial data read-out clock
84	DFSW	I	DFCT selection pin
85	ATSK	I	Input pin for anti-shock

Pin No.	Pin Name	I/O	Function
86	DATA	I	Serial data input, supplied from CPU
87	XLAT	I	Latch input, supplied from CPU
88	CLOK	I	Serial data transfer clock input, supplied from CPU
89	COUT	O	Numbers of track counted signal output
90	DVDD	–	Digital power supply
91	MIRR	O	Mirror signal output
92	DFCT	O	Defect signal output
93	FOK	O	Focus OK output
94	FSW	O	Output to select spindle motor output filter
95	MON	O	Output to control ON/OFF of spindle motor
96	MDP	O	Output to control spindle motor servo
97	MDS	O	Output to control spindle motor servo
98	LOCK	O	GFS is sampled by 460 Hz. H when GFS is H
99	SSTP	I	Input signal to detect disc inner most track
100	SFDR	O	Sled drive output

- **IC103 (CXD2565M)**

Pin No.	Pin Name	I/O	Function
1	INIT	I	Re-synchronizing at rise-up edge of this signal
2	SYSM	–	System muting input
3	ATT	I	Attenuation data input
4	SHIFT	I	Shift clock input
5	LATCH	I	Latch clock input
6	384FSO	O	384fs clock output
7	TEST1	–	Test pin. Fixed to "L" level during normal operation
8	DVss	–	Digital GND
9	TEST2	–	Test pin. Fixed to "L" level during normal operation
10	BCK	I	BCK input
11	DATA	I	Data input
12	LRCK	I	LRCK input
13	MUTEL	O	Not used
14	MUTER	O	Not used
15	DVDD1	–	Digital power supply
16	R1 (+)	O	R-ch PLM output-1 (positive phase)
17	AVDDR	–	L-ch analog power supply
18	R2 (+)	O	R-ch PLM output-2 (positive phase)
19	AVssR	–	L-ch analog GND
20	XVDD	–	Master clock power supply
21	XOUT	O	X'tal oscillator output (33.8 MHz)
22	XIN	I	X'tal oscillator input (33.8 MHz)
23	XVss	–	Master clock GND
24	AVssL	–	L-ch analog GND
25	L2 (+)	O	L-ch PLM output-2 (positive phase)
26	AVDDL	–	L-ch analog power supply
27	L1 (+)	O	L-ch PLM output-1 (positive phase)
28	DVDD2	–	Digital power supply

- **IC321 (CXP82316-041Q)**

Pin No.	Pin Name	I/O	Function
1	TIMER	–	Connected to GND.
2	BUSIN	I	Audio bus input.
3	+5V	–	Connected to +5V.
4	OPEN	–	Not used. (open)
5	OPEN	–	
6	BUS OUT	O	Audio bus output.
7	PGML	O	Latch signal output to digital filter (IC103).
8	CLK	O	Serial clock output.
9	SENSE	I	SENSE signal input.
10	DATA	O	Serial data output.
11	SQCK	O	Read out clock output for subcode Q data.
12	SUBQ	I	Subcode Q data input.
13	OPEN	–	Not used. (open)
14	AMUTE	O	Analog muting control signal output.
15	LDON	O	Optical pickup laser diode control output.
16	XLT	O	Serial data latch signal output.
17	——	–	Not used. (open)
18	RV+	O	Remote commander volume +.
19	RV–	O	Remote commander volume –.
20	LDOUT	O	Loading motor control signal output.
21	LDIN	O	
22	KEY0	I	Key input. (S201 to S216)
23	KEY1	I	
24 to 27	KEY2 to KEY5	–	Connected to +5V.
28	ADJ/AFADJ	–	ADJ, AFJ test pin.
29	IN/OUTSW	I	Loading IN/OUT switch input.
30	RST	I	Reset signal input.
31	EXTAL	I	Clock input. (4 MHz)
32	XTAL	O	Clock output. (4 MHz)
33	Vss	–	GND
34	ICSW	O	CD power supply control pin.
35 to 41	OPEN	–	Not used. (open)
42 to 62	SEG1 to SEG21	O	FL segment output.
63 to 67	1G to 5G	O	FL grid output.
68	OPEN	–	Not used. (open)
69	6G	O	FL grid output.
70	7G	O	
71	VFDP (–30V)	–	–30V pin for FL display tube.
72	V_{DD} (+5V)	–	+5V pin.
73	——	–	
74	SEL1	–	Connected to +5 V.
75	IN PORT	–	
76	IN PORT	–	
77	IN PORT	–	
78	SCOR	I	Read out timing signal input for subcode Q data.
79	SEL2	–	Connected to GND.
80	SEL3	–	Connected to +5 V.

- **IC601 System Control (μPD78043GF-079-3B9) (AEP, IT Model)**

Pin No.	Pin Name	I/O	Function
1	T6	O	FL tube digit output
2	T5	O	
3	T4	O	
4	T3	O	
5	T2	O	
6	T1	O	
7	T0	O	
8	VDD	–	System power supply (+5V)
9	RDS CLOCK	I	RDS clock input
10	—	I	Nut used. (Connected to GND)
11	RDS DATA	I	RDS data input
12	RDS RESET	O	RDS reset output
13	LATCH	O	PLL latch output
14	CLOCK	O	PLL clock output
15	DATA OUT	O	PLL data output
16	DATA IN	I	PLL data (IF count) input
17	RESET	I	System reset input
18	TUNED	I	Tuned (Auto stop) input
19	STEREO	I	Stereo input
20	A/D GND	–	Ground for A/D converter
21	—	I	Not used. (Connected to GND)
22	—	I	
23	—	I	
24	—	I	
25	—	I	
26	KEY IN	I	Key intput
27	KEY IN	I	
28	KEY IN	I	
29	A/D +5V	–	Analog power supply for A/D converter (+5V)
30	A/D REF +5V	–	Reference voltage input for A/D converter (+5V)
31	—	I	Not used. (Connected to GND)
32	—	–	Not used. (open)
33	SYS GND	–	System ground terminal
34	X1	I	Main system clock (4.194304 MHz)
35	X2	O	Main system clock
36	RDS EON OUT	O	RDS EON output
37	F MONI	O	F monitor output (2048 Hz)
38	—	I	Not used. (Connected to GND)
39	—	I	
40	—	I	

Pin No.	Pin Name	I/O	Function
41	—	I	Not used. (Connected to GND)
42	—	I	
43	CD BUSY	I	CD busy input
44	RDS START	I	RDS data start input
45	SIRCS	I	SIRCS input
46	AUB IN	I	AUB input
47	INTP0	I	Power failure detection input
48	GND	–	Internal connection (Connected to GND)
49	AUB OUT	O	AUB output
50	MUTING	O	Muting output (Tuner)
51	RELAY	O	Relay output (Power)
52	VDD	–	System power supply (+5V)
53	—	I	Not used. (Connected to GND)
54	—	I	
55	—	I	
56	EON	I	Initial setting input (EON)
57	DIMMER	I	Initial setting input (EON active)
58	AUTO TUN	I	Initial setting input (AUTO TUN)
59	VERSION	I	Initial setting input (the distination)
60	VERSION	I	
61	S15	O	FL tube segment output
62	S14	O	
63	S13	O	
64	S12	O	
65	S11	O	
66	S10	O	
67	S9	O	
68	S8	O	
69	S7	O	
70	S6	O	
71	–30V	–	Negative power supply for the FL tube
72	S5	O	FL tube segment output
73	S4	O	
74	S3	O	
75	S2	O	
76	S1	O	
77	S0	O	
78	T9	O	FL tube digit output
79	T8	O	
80	T7	O	

- **IC601 System Control (TMP47C1270AN-H227) (E, AUS, MX, PX Model)**

Pin No.	Pin Name	I/O	Function
1	V_{KK}	–	–29V power supply for driving fluorescent display.
2	S15	O	Fluorescent display driving
3	S14	O	
4	S13	O	
5	S12	O	
6	S11	O	
7	S10	O	
8	S9	O	
9	S8	O	
10	S7	O	
11	S6	O	
12	S5	O	
13	S4	O	
14	K00	I	Key input
15	K01	I	
16	K02	I	
17	K03	I	
18	TEST	–	Test terminal
19	X IN	I	System clock (8.388608 Hz) connected to crystal oscillator.
20	X OUT	O	
21	RESET	I	System reset input
22	HOLD	I	
23	IF COUNT NG	I	CD busy input
24	R60	I	Key input
25	—	–	Not used
26	R62	I	Diode input
27	R63	I	
28	P10	O	Key output
29	P11	O	
30	P12	O	
31	P13	O	
32	GND	–	GND
33	P20	O	Key output
34	P21	O	
35	P22	O	
36	—	–	Not used
37	RELAY	O	RELAY output
38	MUTING	O	MUTING output
39	TUNED IN	I	TUNED input
40	STEREO IN	I	STEREO input

Pin No.	Pin Name	I/O	Function
41	SIRCS	I	SIRCS input
42	AUB OUT	O	Audio bus output
43	AUB IN	I	Audio bus input
44	CE	O	Chip select to tuner PLL IC (LC7218)
45	SI	I	Serial data from tuner PLL IC (LC7218)
46	SO	O	Serial data to tuner PLL IC (LC7218)
47	SCK	O	Serial clock to tuner PLL IC (LC7218)
48	—	–	Not used
49	—	–	
50	1G	O	Fluorescent display driving
51	2G	O	
52	3G	O	
53	4G	O	
54	5G	O	
55	6G	O	
56	7G	O	
57	8G	O	
58	9G	O	
59	10G	O	
60	S0	O	
61	S1	O	
62	S2	O	
63	S3	O	
64	V_{DD}	–	+5V power supply

- **IC902 Deck Controller (M50964-261FP)**

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Function</th></tr>
<tr><td>1</td><td>G</td><td>–</td><td rowspan="3">GND</td></tr>
<tr><td>2</td><td>G</td><td>–</td></tr>
<tr><td>3</td><td>G</td><td>–</td></tr>
<tr><td>4</td><td>—</td><td>–</td><td>+5V</td></tr>
<tr><td>5</td><td>$\overline{\text{NORM}}$/HIGH</td><td>–</td><td>Tape speed “H”=High speed “L”=Normal speed</td></tr>
<tr><td>6</td><td>B HALF</td><td>I</td><td>Deck B record prevention claw A, B detection input (Analog)
<table>
<tr><td>Voltage (V)</td><td>1V</td><td>1.9V</td><td>2.8V</td><td>3.9V</td><td>5V</td></tr>
<tr><td>Half</td><td>ON</td><td>ON</td><td>ON</td><td>ON</td><td>OFF</td></tr>
<tr><td>E. PROOF A</td><td>OFF</td><td>ON</td><td>OFF</td><td>ON</td><td>OFF</td></tr>
<tr><td>E. PROOF B</td><td>ON</td><td>ON</td><td>OFF</td><td>OFF</td><td>OFF</td></tr>
</table></td></tr>
<tr><td>7</td><td>KEY Y</td><td>I</td><td rowspan="2">KEY input
<table>
<tr><td>Voltage (V)</td><td>0</td><td>0.3</td><td>0.7</td><td>1.2</td><td>1.7</td><td>2.3</td><td>2.8</td><td>3.4</td><td>4.0</td><td>4.5</td><td>5.0</td></tr>
<tr><td>KEY Y</td><td>B ■</td><td>B ▮▮</td><td>B ▶</td><td>B ◀</td><td></td><td>A ◀◀</td><td>A ▶▶</td><td></td><td></td><td>RELAY</td><td>OFF</td></tr>
<tr><td>KEY X</td><td>A ■</td><td>A ▶</td><td>A ◀</td><td>B ◀◀</td><td>B ▶▶</td><td>B ●</td><td>DUB</td><td></td><td>CD</td><td></td><td></td></tr>
</table></td></tr>
<tr><td>8</td><td>KEY X</td><td>I</td></tr>
<tr><td>9</td><td>AMS IN</td><td>I</td><td>AMS signal input</td></tr>
<tr><td>10</td><td>L MUTE</td><td>O</td><td>Line mute output</td></tr>
<tr><td>11</td><td>$\overline{\text{R MUTE}}$</td><td>O</td><td>Mute output</td></tr>
<tr><td>12</td><td>$\overline{\text{RELAY}}$ (B MD)</td><td>O</td><td>REC/PB change relay output</td></tr>
<tr><td>13</td><td>$\overline{\text{R}}$/P</td><td>O</td><td>Dolby IC REC/PB select output</td></tr>
<tr><td>14</td><td>EQ70</td><td>O</td><td>Playback EQ output for playing deck (Not used)</td></tr>
<tr><td>15</td><td>SEL A/$\overline{\text{B}}$</td><td>O</td><td>Dolby IC PB input Deck A/B select output</td></tr>
<tr><td>16</td><td>AMS MUTE</td><td>O</td><td>AMS mute output</td></tr>
<tr><td>17</td><td>AU BUS</td><td>I</td><td>AUDIO BUS input</td></tr>
<tr><td>18</td><td>BIAS</td><td>O</td><td>Bias oscillation output</td></tr>
<tr><td>19</td><td>AUB OUT</td><td>O</td><td>AUDIO BUS output</td></tr>
<tr><td>20</td><td>A BUS</td><td>I</td><td>AUDIO BUS normal input</td></tr>
<tr><td>21</td><td>NC</td><td>–</td><td>Not used</td></tr>
<tr><td>22</td><td>NC</td><td>–</td><td rowspan="3">GND</td></tr>
<tr><td>23</td><td>NC</td><td>–</td></tr>
<tr><td>24</td><td>Vss</td><td>–</td></tr>
<tr><td>25</td><td>RESET</td><td>I</td><td>Microcomputer reset input</td></tr>
<tr><td>26</td><td>XIN</td><td>I</td><td>Clock input (4 MHz)</td></tr>
<tr><td>27</td><td>XOUT</td><td>O</td><td>Clock output (4 MHz)</td></tr>
<tr><td>28</td><td>ϕ</td><td>O</td><td>Not used (open)</td></tr>
<tr><td>29</td><td>Vss</td><td>–</td><td rowspan="2">GND</td></tr>
<tr><td>30</td><td>PW IN</td><td>I</td></tr>
<tr><td>31</td><td>A STOP</td><td>I</td><td>Deck A STOP switch input</td></tr>
<tr><td>32</td><td>A HALF</td><td>I</td><td>Deck A Half switch input</td></tr>
<tr><td>33</td><td>A SHUT</td><td>I</td><td>Deck A Reel table signal input</td></tr>
<tr><td>34</td><td>A70 U</td><td>I</td><td>GND</td></tr>
<tr><td>35</td><td>B STOP</td><td>I</td><td>Deck B STOP switch input</td></tr>
</table>

Pin No.	Pin Name	I/O	Function
36	B SHUT	I	Deck B Reel table signal input
37	B70 U	I	+5V
38	NC	–	Not used
39	ARM 3	O	Deck A Reel Motor control out
40	ARM 2	O	
41	ARM 1	O	
42	BRM 3	O	Deck B Reel Motor control out
43	BRM 2	O	
44	BRM 1	O	
45	H/L	O	Capstan motor speed select
46	A CM	O	A Capstan motor ON/OFF
47	B CM	O	B Capstan motor ON/OFF
48	BS/ASCH	I	Deck B Reel table/BS signal input
49	AP/BSCH	I	Deck A Reel table/AP signal input
50	A REV	O	Deck A RVS LED output
51	A FWD	O	Deck A FWD LED output
52	A PLAY	O	Deck B RVS/FWD LED control output (Not used)
53	DUB H	O	High Speed Dubbing LED output
54	DUB N	O	Normal Speed Dubbing LED output
55	NC	–	Not used
56	CD SYNC	O	Auto CD Synchro LED output
57	B REV	O	Deck B RVS LED output
58	B FWD	O	Deck B FWD LED output
59	B PLAY	O	Deck B RVS/FWD LED control output (Not used)
60	B PAUSE	O	Deck B PAUSE LED output
61	B REC	O	Deck B REC LED output
62	PASS	O	PASS amplifier switch output
63	TEST	I	Electrical adjustment test mode setting
64	NC	–	Not used
65	Vss	–	GND
66	NC	–	Not used
67	Vcc	–	POWER 5 ± 0.5V
68	AVss	–	Analog system GND
69	VREF	I	Analog system reference voltage input
70	DAC	–	GND
71	—	–	
72	—	–	

[TEST MODE]

When making pin ⑥③ low (connect pin ① of CN904 to ground with jumper wire), following function operates.

1. Source monitor
   Release the line mute while recording.

- **IC1501 TA Control (μPD78042GF-056-3B9)**

Pin No.	Pin Name	I/O	Function
1	7G	O	FL tube digit output
2	6G	O	
3	5G	O	
4	4G	O	
5	3G	O	
6	2G	O	
7	1G	O	
8	VDD	–	Power supply pin (+5V)
9	K3	I	Key scan input
10	K2	I	
11	K1	I	
12	DBS	O	Not used. (open)
13	SURROUND	O	
14	AUB OUT	O	Audio bus output
15	CLK (GEQ)	O	Serial clock line (IC1005 NJU7305L) output
16	DAT (GEQ)	O	Serial data line (IC1005 NJU7305L) output
17	$\overline{\text{RES}}$	I	Reset. "L": reset
18	LINE MUT (OD)	O	Line mute output
19	$\overline{\text{MULTI (OD)}}$	O	Multi plex ON/OFF. "L": on
20	AVss	I	Ground pin
21	*	I	Not used. (Connected to GND)
22	F7	I	Frequency for speana input
23	F6	I	
24	F5	I	
25	F4	I	
26	F3	I	
27	F2	I	
28	F1	I	
29	AVDD	–	Power supply pin (+5V)
30	AVREF	–	A/D reference voltage input
31	AUB IN	I	Audio bus input
32	*	–	Not used. (open)
33	Vss	–	Ground pin
34	X1	I	Connected to system clock (4.19 MHz) oscillator.
35	X2	O	
36	FNC-A	O	Function LED control output
37	FNC-B	O	
38	FNC-G	O	
39	SEL-A	O	Selection LED control output
40	SEL-B	O	

Pin No.	Pin Name	I/O	Function
41	SEL-G	O	Selection LED control output
42	MULTI	O	Multi plex LED output
43	VOL LED	O	Volume LED output
44	VOL UP	O	Volume up output
45	VOL DOWN	O	Volume down output
46	P FILE	O	P.file LED output
47	AC CUT IN	I	AC cut input
48	IC (Vss)	–	Not used. (Connected to GND)
49	C (OD)	O	Function control output
50	B (OD)	O	
51	A (OD)	O	
52	VDD	–	Power supply pin (+5V)
53	MEMORY	O	Memory LED output
54	EFECT	O	Equalizer LED output
55	#5	O	#5 LED output
56	SURROUND	I	Not used. (Connected to GND)
57	CS (GEQ)	O	CS line (IC1005 NJU7305L) output
58	(INPUT)	I	Not used. (Connected to GND)
59	S15	O	FL tube segment output
60	S14	O	
61	S13	O	
62	S12	O	FL tube segment output (key scan output)
63	S11	O	
64	S10	O	
65	S9	O	
66	S8	O	
67	S7	O	
68	S6	O	
69	S5	O	FL tube segment output
70	S4	O	
71	V LOAD	–	Power supply pin (–33V) for pull down register
72	S3	O	FL tube segment output
73	S2	O	
74	S1	O	
75	13G	O	FL digit output
76	12G	O	
77	11G	O	
78	10G	O	
79	9G	O	
80	8G	O	

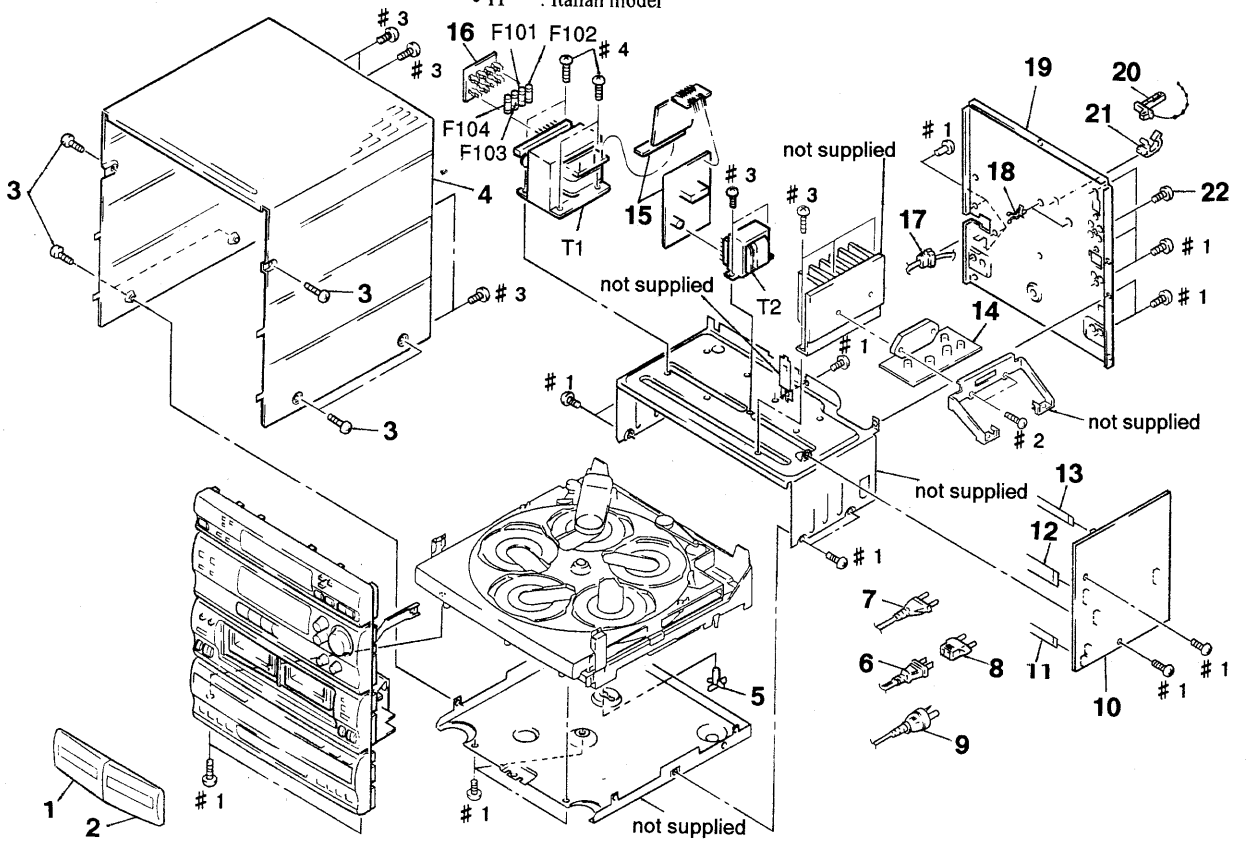
SECTION 7
EXPLODED VIEWS

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts color Cabinet's color
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- AUS : Australian model
- MX : Mexican model
- IT : Italian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

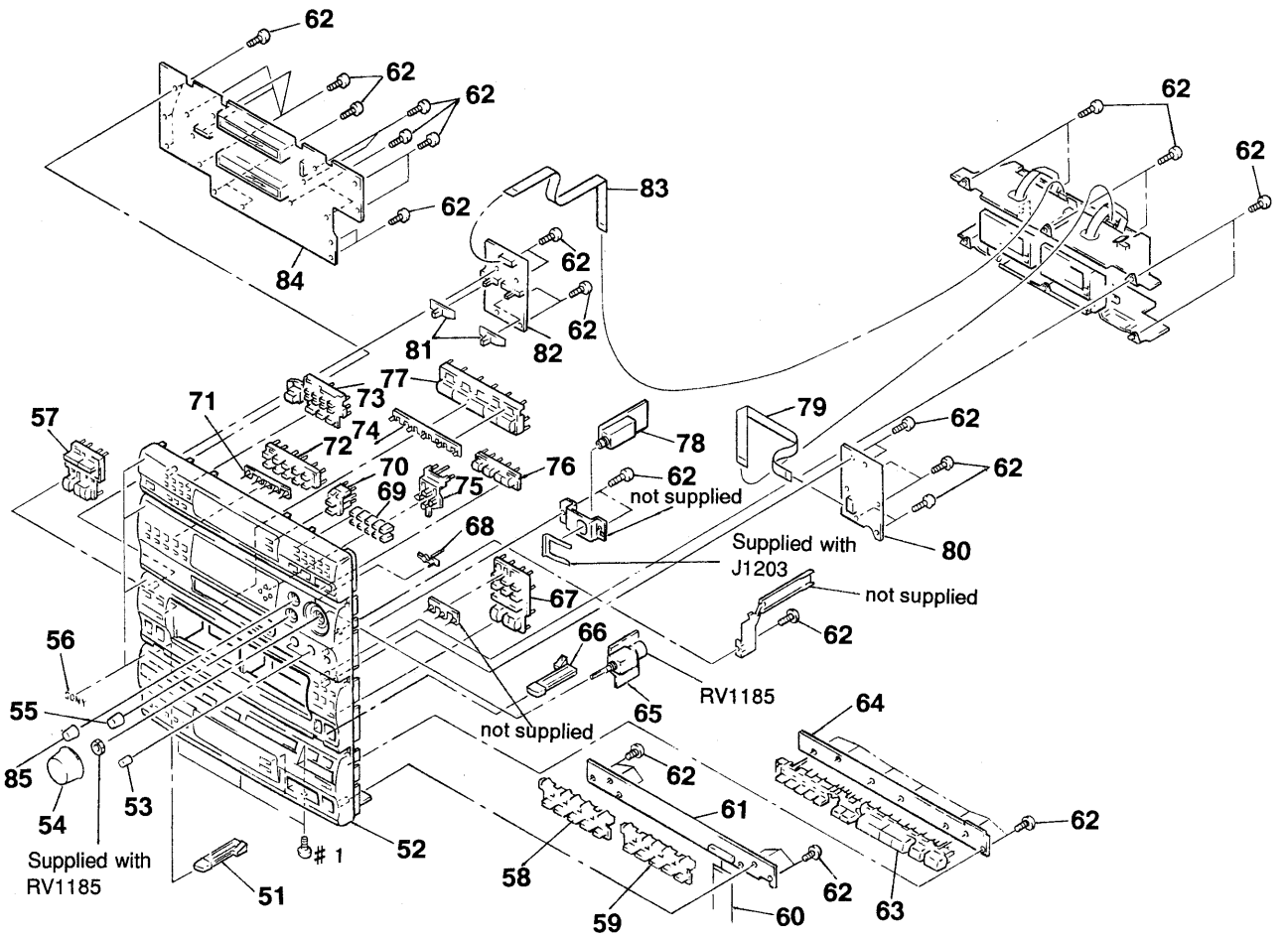
7-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	X-4944-374-1	LID (A) ASSY, CASSETTE	
2	X-4944-375-1	LID (B) ASSY, CASSETTE	
3	3-363-099-01	SCREW (CASE 3 TP2)	
4	4-962-724-42	CASE (CDM)	
5	4-937-945-01	PLATE (TRANSPORT), LOCK	
⚠6	1-575-653-11	CORD, POWER (E, MX, PX)	
⚠7	1-575-651-11	CORD, POWER (AEP, IT)	
⚠8	1-569-007-11	ADAPTER, CONVERSION 2P (PX)	
⚠9	1-690-608-11	CORD, POWER (AUS)	
* 10	A-4369-203-A	MAIN BOARD, COMPLETE (E, AUS, PX)	
* 10	A-4371-220-A	MAIN BOARD, COMPLETE (MX)	
* 10	A-4371-224-A	MAIN BOARD, COMPLETE (AEP)	
* 10	A-4371-228-A	MAIN BOARD, COMPLETE (IT)	
11	1-765-365-11	CORD, CONNECTION (15 CORE)	
12	1-690-824-11	WIRE, FLAT TYPE (25 CORE)	
13	1-575-906-11	WIRE, FLAT TYPE (15 CORE) (AEP, IT)	
13	1-590-459-11	WIRE, FLAT TYPE (11 CORE) (E, AUS, MX, PX)	
* 14	A-4369-197-A	POWER AMP BOARD, COMPLETE (AEP)	
* 14	A-4369-205-A	POWER AMP BOARD, COMPLETE (E, AUS, PX)	
* 14	A-4371-222-A	POWER AMP BOARD, COMPLETE (MX)	
* 14	A-4371-231-A	POWER AMP BOARD, COMPLETE (IT)	
* 15	A-4369-193-A	POWER BOARD, COMPLETE (AEP, IT)	
* 15	A-4369-202-A	POWER BOARD, COMPLETE (E, PX)	
* 15	A-4371-219-A	POWER BOARD, COMPLETE (MX)	
* 15	A-4371-223-A	POWER BOARD, COMPLETE (AUS)	

Ref. No.	Part No.	Description	Remark
* 16	1-652-388-21	FUSE BOARD (AEP, IT)	
* 16	1-652-389-21	FUSE BOARD (E, AUS, MX, PX)	
* 17	3-703-244-00	BUSHING (2104), CORD (AEP, AUS, IT)	
17	3-703-571-00	BUSHING (S) (4516), CORD (E, MX, PX)	
18	4-953-346-01	CLAMP, LEAD	
* 19	4-962-748-11	PANEL, BACK (AEP)	
* 19	4-962-748-31	PANEL, BACK (IT)	
* 19	4-962-749-02	PANEL, BACK (AUS)	
* 19	4-962-749-11	PANEL, BACK (PX)	
* 19	4-962-749-22	PANEL, BACK (E)	
* 19	4-962-749-31	PANEL, BACK (MX)	
20	4-956-370-02	BAND, PLUG FIXED (AUS)	
* 21	4-949-235-01	HOOK (AEP, E, IT, MX, PX)	
22	3-704-515-21	SCREW (BV/RING)	
⚠F101	1-532-286-00	FUSE (T2.5A)	
⚠F102	1-532-286-00	FUSE (T2.5A)	
⚠F103	1-532-299-00	FUSE (T5.0A)	
⚠F104	1-532-299-00	FUSE (T5.0A)	
⚠T1	1-423-927-21	TRANSFORMER, POWER (AEP, IT)	
⚠T1	1-423-928-21	TRANSFORMER, POWER (E, AUS, PX)	
⚠T1	1-426-826-11	TRANSFORMER, POWER (MX)	
⚠T2	1-423-929-21	TRANSFORMER, POWER (AEP, IT)	
⚠T2	1-423-930-21	TRANSFORMER, POWER (E, AUS, MX, PX)	

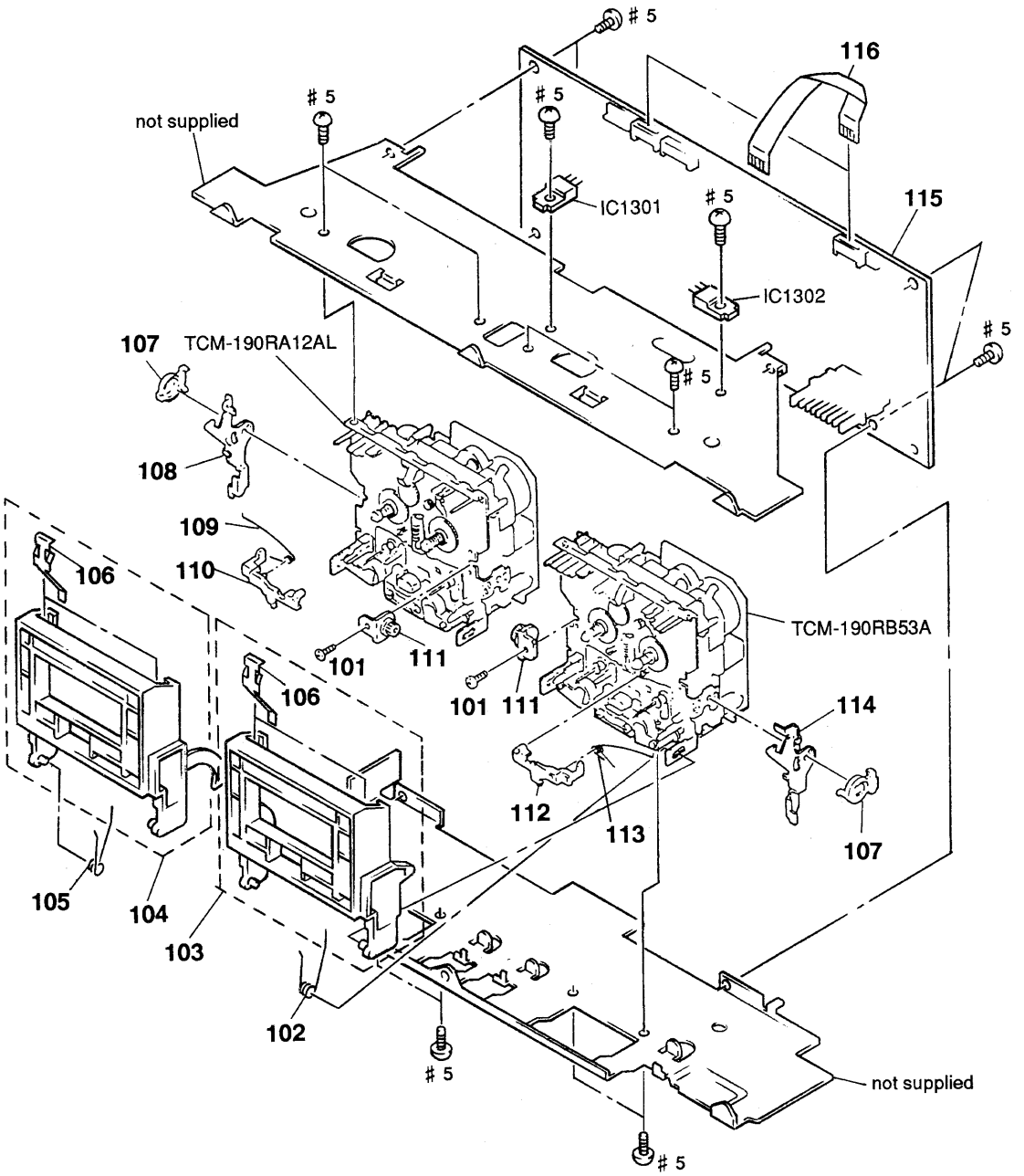
7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	4-962-709-11	BUTTON (EJECT) (L)	
52	X-4944-991-1	PANEL ASSY, FRONT (AEP, IT)	
52	X-4944-992-1	PANEL ASSY, FRONT (E, AUS, MX, PX)	
53	4-955-744-21	KNOB (BA)	
54	4-955-635-21	KNOB (V)	
55	4-962-703-22	KNOB (SUR)	
56	4-962-708-21	EMBLEM (4-A), SONY	
57	4-962-684-11	BUTTON (A DECK)	
58	4-962-696-01	BUTTON (5A)	
59	4-962-697-01	BUTTON (5B)	
60	1-765-385-11	WIRE (FLAT TYPE) (34 CORE)	
* 61	1-651-117-11	CD LOWER BOARD	
62	4-951-620-01	SCREW (2.6X8), +BVTP	
63	4-962-675-11	BUTTON (CDM)	
* 64	1-651-116-11	CD UPPER BOARD	
* 65	1-651-167-11	VR BOARD	
66	4-962-710-11	BUTTON (EJECT) (R)	
67	4-962-685-11	BUTTON (B DECK)	
68	4-962-682-21	INDICATOR (VO)	
69	4-962-676-21	BUTTON (PRESET)	

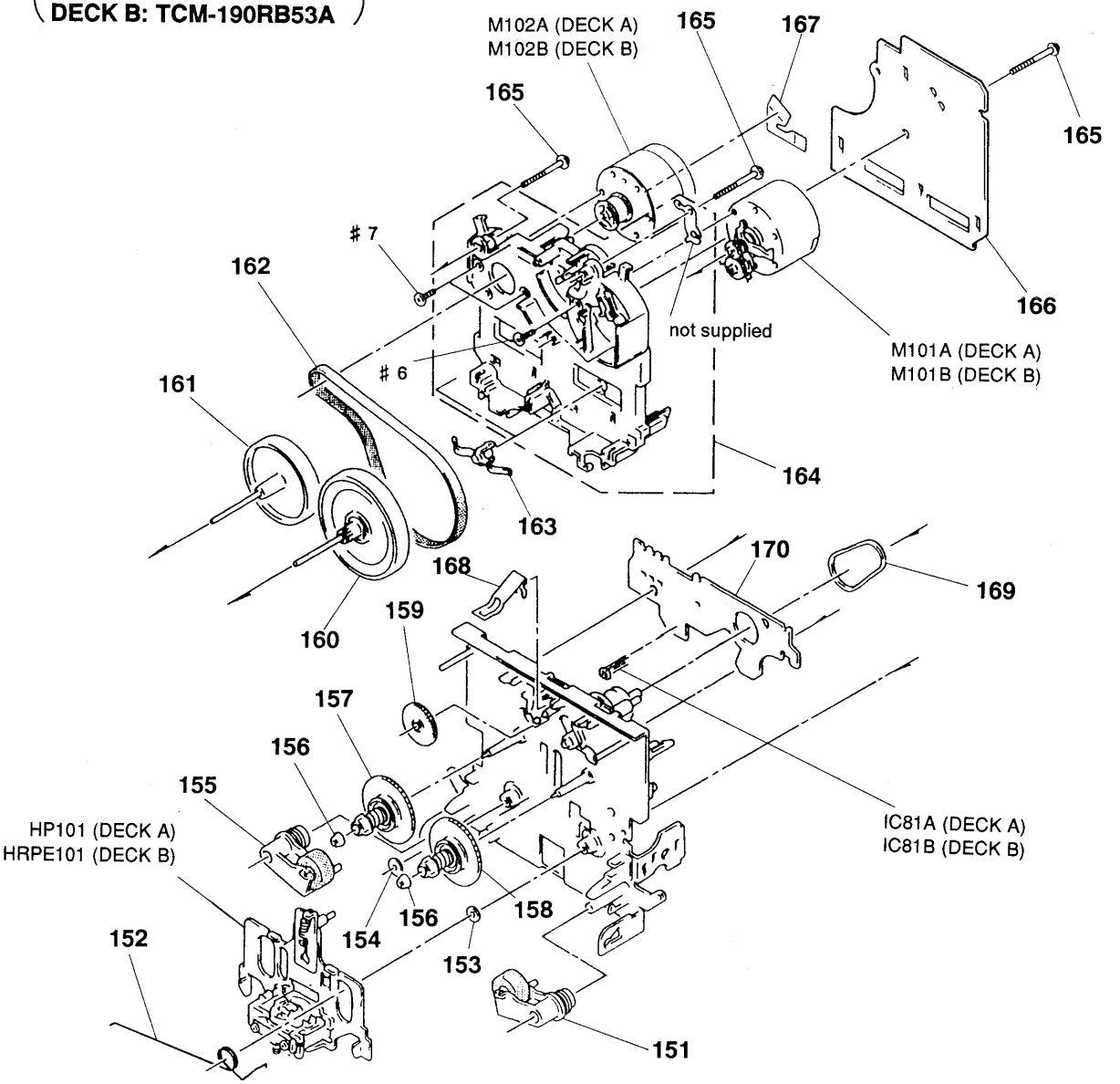
Ref. No.	Part No.	Description	Remark
70	4-962-690-11	BUTTON (RDS) (AEP, IT)	
71	4-962-677-21	INDICATOR (SELECT 5)	
72	4-962-691-11	BUTTON (EFFECT)	
73	4-962-689-11	BUTTON (TIMER)	
74	4-962-680-21	INDICATOR (FU)	
75	4-962-692-11	BUTTON (CURSOR)	
76	4-962-661-21	BUTTON (BAND)	
77	4-962-681-21	BUTTON (FU)	
* 78	1-651-166-21	H.P BOARD	
79	1-751-210-11	WIRE (FLAT TYPE) (13 CORE)	
* 80	1-751-781-21	PANEL (B) BOARD	
81	4-962-707-11	KNOB, SLIDE	
* 82	1-650-780-21	PANEL (A) BOARD	
83	1-751-025-11	WIRE (FLAT TYPE) (9 CORE)	
* 84	A-4369-187-A	PANEL BOARD, COMPLETE (AEP)	
* 84	A-4369-200-A	PANEL BOARD, COMPLETE (E, AUS, MX, PX)	
* 84	A-4371-226-A	PANEL BOARD, COMPLETE (IT)	
85	4-962-703-51	KNOB (SUR)	

7-3. MECHANISM DECK CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
101	4-951-620-01	SCREW (2.6X8), +BVTP	
102	3-354-960-01	SPRING (LOADING R), TORSION	
103	A-4325-164-A	HOLDER (R) ASSY, CASSETTE	
104	A-4325-163-A	HOLDER (L) ASSY, CASSETTE	
105	3-354-959-01	SPRING (LOADING L), TORSION	
106	3-308-823-11	DETENT, CASSETTE	
107	3-354-957-01	JOINT (LOCK LEVER)	
* 108	3-354-953-01	LEVER (LOCK LEVER L)	
109	3-354-961-01	SPRING (EJ SAFTY SPRING L)	
110	3-354-955-01	LEVER (EJ SAFTY LEVER L)	
111	3-354-963-01	DAMPER	
112	3-354-956-01	LEVER (EJ SAFTY LEVER R)	
113	3-354-962-01	SPRING (EJ SAFTY SPRING R)	
* 114	3-354-954-01	LEVER (LOCK LEVER R)	
* 115	A-4365-875-A	MAIN TC BOARD, COMPLETE	
116	1-590-485-11	WIRE, FLAT TYPE (7 CORE)	
IC1301	8-759-604-95	IC M5F79M07	
IC1302	8-759-604-84	IC M5F7806	

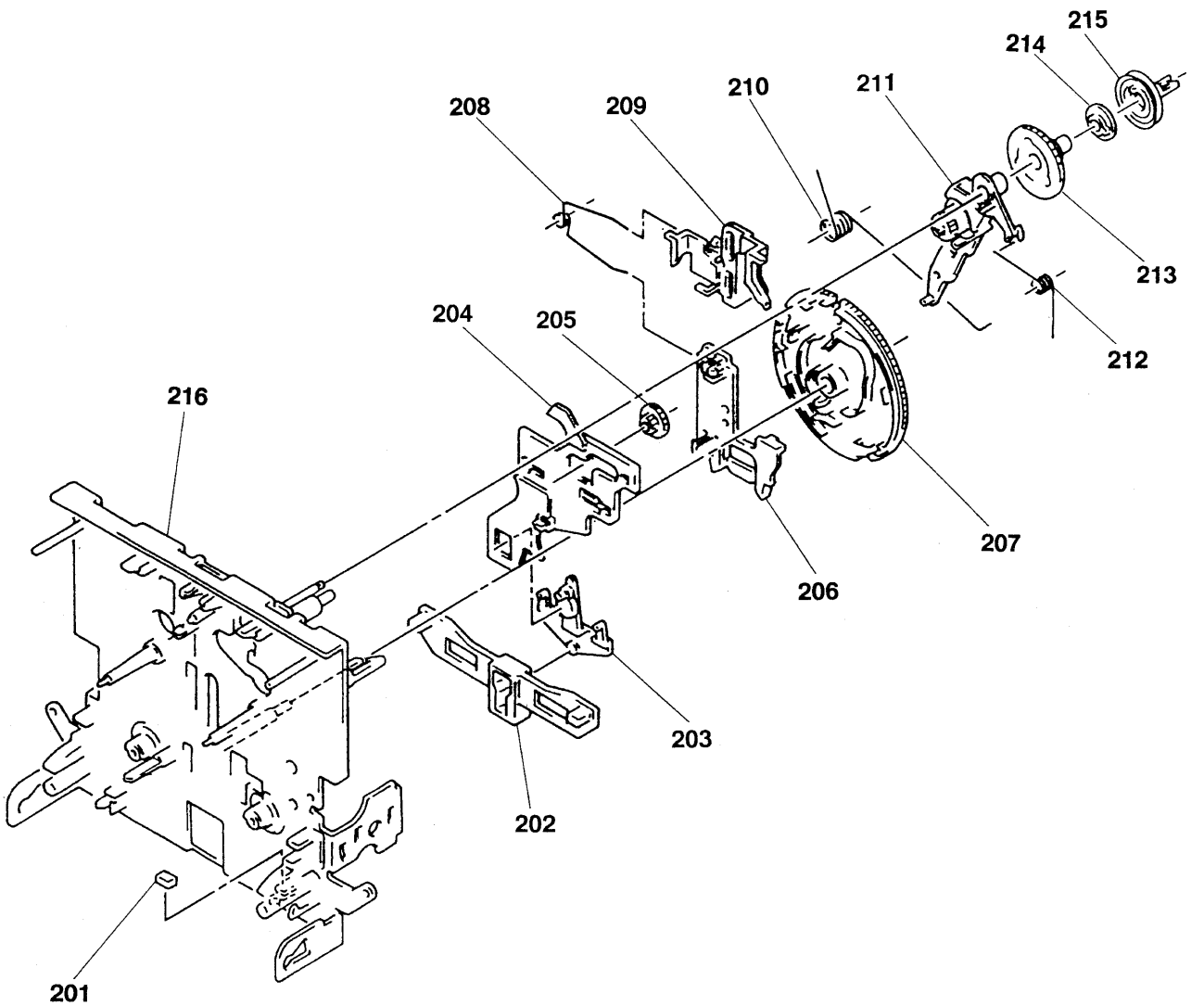
7-4. MECHANISM DECK SECTION-1
(DECK A: TCM-190RA12AL)
(DECK B: TCM-190RB53A)



Ref. No.	Part No.	Description	Remark
151	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY	
152	3-907-362-01	SPRING, TORSION	
153	3-356-713-01	WASHER	
154	3-356-714-01	WASHER	
155	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY	
156	3-362-308-01	CAP (REEL)	
157	X-3362-078-1	TABLE ASSY, REEL	
158	X-3359-404-1	TABLE (A) ASSY, REEL	
159	3-359-424-01	GEAR (REV GEAR)	
160	X-3359-406-1	FLYWHEEL (FWD) ASSY	
161	X-3359-410-1	FLYWHEEL (REV) ASSY	
162	3-359-417-01	BELT (FLAT), CAPSTAN	
163	3-575-321-00	RETAINER, THRUST, CAPSTAN	
* 164	3-359-436-01	BASE (THRUST RETAINER), FITTING	
165	3-359-414-01	SCREW (+PTPWH 2X23)	

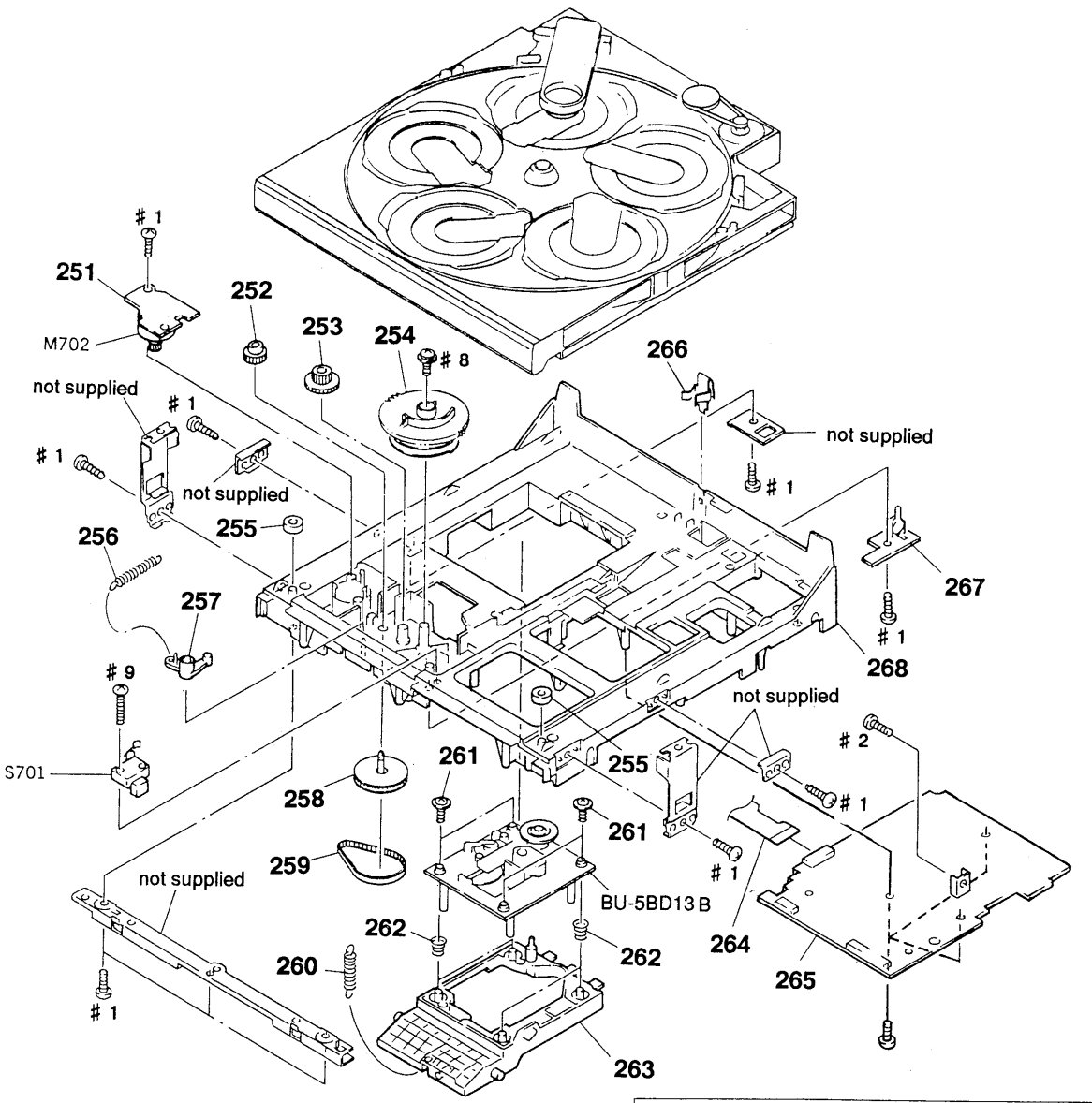
Ref. No.	Part No.	Description	Remark
* 166	A-2006-609-A	MD-A BOARD, COMPLETE (RA12AL)	
* 166	A-2007-138-A	MD-B BOARD, COMPLETE (RB53A)	
167	1-638-983-11	MOTOR FLEXIBLE BOARD	
168	3-359-430-01	SPRING(CASSETTE RETAINER), LEAF	
169	3-359-466-01	BELT (FR), SQUARE	
* 170	1-634-841-14	LEAF SW-A BOARD (DECK A)	
* 170	1-634-841-14	LEAF SW-B BOARD (DECK B)	
HP101	A-2003-837-F	DECK ASSY, HEAD (DECK A)	
IC81A	8-749-924-10	PHOTO REFECTOR NJ5165-B (DECK A)	
IC81B	8-749-924-10	PHOTO REFECTOR NJ5165-B (DECK B)	
M101A	X-3363-501-1	MOTOR ASSY (REEL) (DECK A)	
M101B	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	
M102A	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK A)	
M102B	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK B)	
HRPE101	A-2003-838-F	DECK ASSY, HEAD (DECK B)	

7-5. MECHANISM DECK SECTION-2
(DECK A: TCM-190RA12AL)
(DECK B: TCM-190RB53A)



Ref. No.	Part No.	Description	Remark
201	3-359-469-01	SPACER	
* 202	3-359-425-01	SLIDER (REVERSE SLIDER)	
203	3-359-426-01	LEVER (REVERSE LEVER)	
* 204	3-359-415-01	SLIDER (TRIGGER SLIDER)	
205	3-359-448-01	GEAR (TRIGGER)	
* 206	3-359-427-01	SLIDER (LEVERSE SLIDER)	
207	3-359-420-01	GEAR (CAM GEAR)	
208	3-359-455-01	SPRING, TORSION	
209	3-359-429-01	SLIDER (BRAKE PLATE)	
210	3-359-456-01	SPRING(TRIGGER SPRING),TORSION	
211	X-3359-405-1	LEVER (FR ARM) ASSY	
212	3-359-453-01	SPRING (FR ARM), TORSION	
213	3-359-419-01	GEAR (FR GEAR)	
214	3-359-421-01	CLUTCH (REEL DISK)	
215	3-359-418-01	PULLEY (FR PULLEY)	
216	X-3359-415-1	CHASSIS ASSY, MECHANICAL	

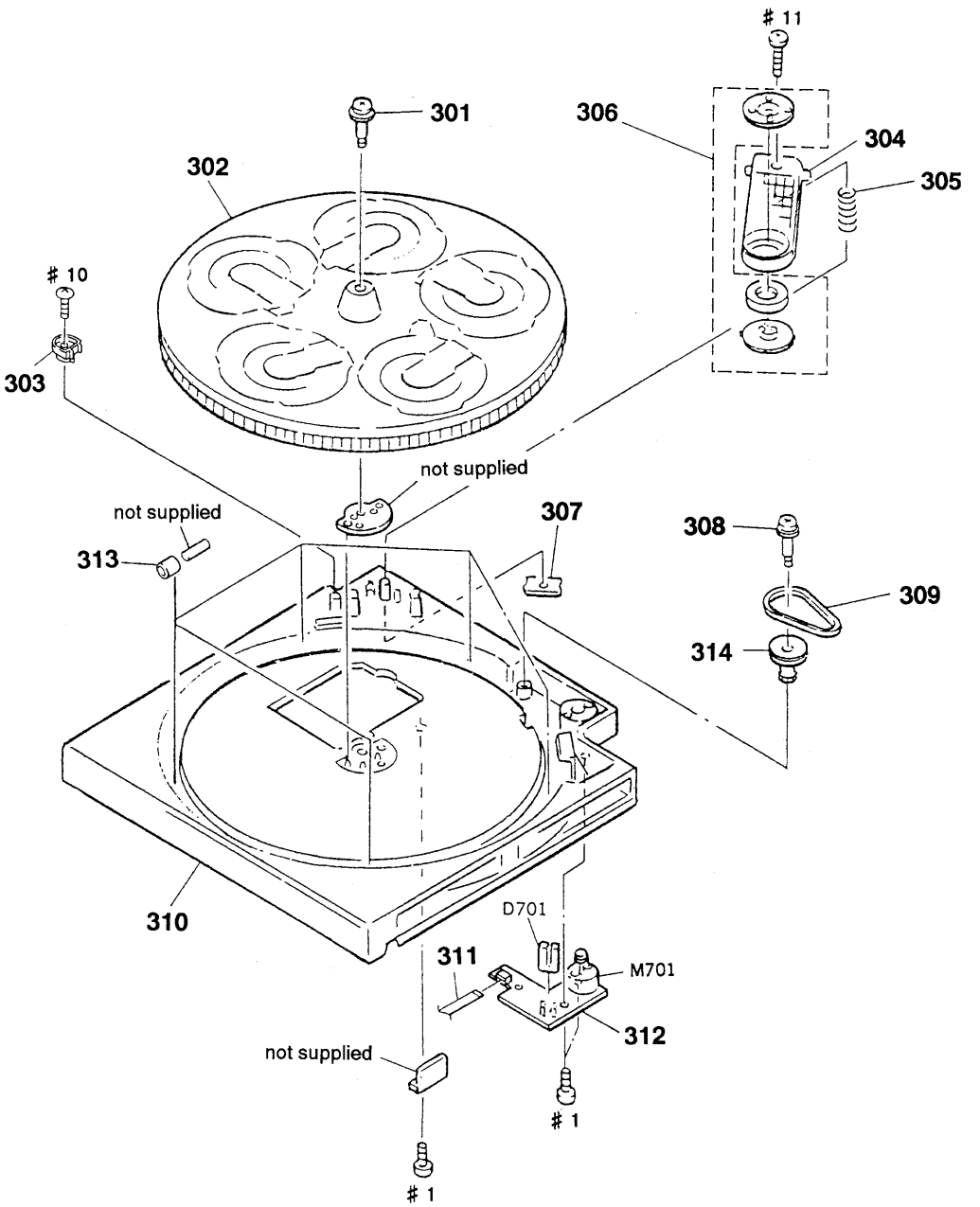
7-6. CHASSIS SECTION



Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

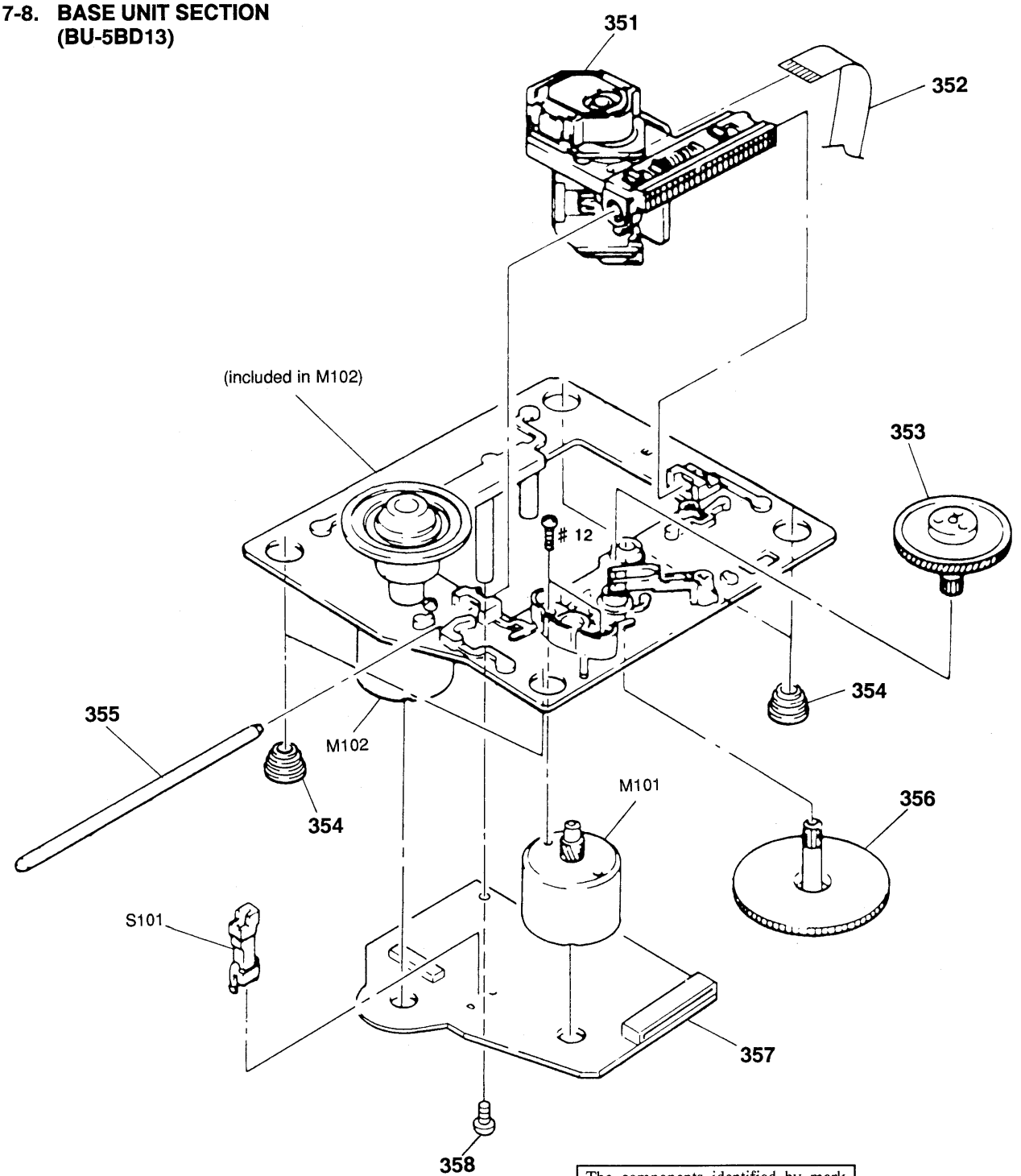
Ref. No.	Part No.	Description	Remark
* 251	1-638-730-11	LOADING MOTOR BOARD	
252	4-934-375-01	GEAR (LOADING B)	
253	4-934-381-01	GEAR (LOADING C)	
254	4-934-391-01	GEAR (LOADING A)	
* 255	4-951-619-01	CUSHION (A)	
256	4-924-412-01	SPRING (B), TENSION	
* 256	4-943-996-06	SPRING, LEAF	
257	4-917-519-01	LEVER, SET	
258	X-4941-529-1	PULLEY ASSY	
259	4-944-490-01	BELT (TIMING)	
260	4-937-911-01	SPRING, TENSION	
261	4-933-134-01	SCREW (+PTPWH M2.6X6)	
262	4-958-593-01	SPRING (BU), COMPRESSION	
* 263	4-934-373-01	BRACKET (BU)	
264	1-537-645-11	JUMPER, FILM (WITH TERMINAL)	
* 265	A-4369-185-A	CD MAIN BOARD, COMPLETE	
* 267	1-638-731-11	OPEN/UP SW BOARD	
* 268	4-943-997-01	CHASSIS	
M702	A-4604-834-A	MOTOR ASSY, LOADING	
S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	

7-7. TRAY SECTION



Ref. No.	Part No.	Description	Remark
301	4-926-384-01	SCREW, STEP	
* 302	4-926-383-01	TABLE (B), DISK	
* 303	4-949-226-01	PLATE, LOCK	
* 304	4-930-506-02	BRACKET (PRESS PULLEY)	
305	4-926-395-01	SPRING, COMPRESSION	
* 306	1-452-538-11	MAGNET	
* 307	4-926-388-01	BRACKET (ADJUSTMENT)	
308	4-923-597-01	SCREW, STEP	
310	4-955-787-31	TABLE, DISK	
311	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
* 312	1-638-729-11	TABLE MOTOR BOARD	
313	X-4924-457-1	ROLLER ASSY	
314	4-934-380-01	PULLEY (R)	
D701	8-719-970-19	DIODE GP1A521	
M701	A-4604-585-A	MOTOR ASSY, ROTARY	

7-8. BASE UNIT SECTION (BU-5BD13)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
⚠351	8-848-144-11	OPTICAL PICK-UP BLOCK (KSS-240A)	
352	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
353	4-917-567-01	GEAR (M)	
354	4-951-940-01	INSULATOR (BU)	
355	4-917-565-01	SHAFT, SLED	
356	4-917-564-01	GEAR (P), FLATNESS	
* 357	A-4649-955-A	BD BOARD, COMPLETE	
358	4-951-620-01	SCREW (2.6X8), +BVTP	
M101	X-4917-504-1	MOTOR ASSY (SLED)	
M102	X-4917-523-3	MOTOR ASSY (SPINDLE)	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	

BD

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ Parts color ↑ Cabinet's color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB...,
  uPC...: μPC..., uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH
- AUS : Australian model
- MX : Mexican model
- IT : Italian model

Ref.No.	Part No.	Description			Remark
*	A-4649-955-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C105	1-135-155-21	TANTALUM CHIP	4.7uF	10%	16V
C106	1-164-346-11	CERAMIC CHIP	1uF		16V
C107	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C108	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C110	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C112	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C113	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C123	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C124	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C131	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C132	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C133	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C153	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C161	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C177	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C178	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C179	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C181	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C182	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C183	1-135-156-21	TANTALUM CHIP	6.8uF	10%	10V
C184	1-135-156-21	TANTALUM CHIP	6.8uF	10%	10V
C185	1-135-156-21	TANTALUM CHIP	6.8uF	10%	10V
C186	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C187	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C188	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C191	1-163-091-00	CERAMIC CHIP	8PF		50V
C192	1-163-091-00	CERAMIC CHIP	8PF		50V
C193	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C194	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C195	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C196	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C197	1-163-038-00	CERAMIC CHIP	0.1uF		25V

Ref.No.	Part No.	Description			Remark
		< CONNECTOR >			
* CN101	1-580-875-11	SOCKET, CONNECTOR (SMT) 26P			
CN102	1-565-771-11	CONNECTOR, FPC (1.0MM)(ZIF)12P			
		< IC >			
IC101	8-752-361-90	IC CXD2515Q			
IC102	8-759-176-09	IC BA6392FP			
IC103	8-752-367-61	IC CXD2565AM			
		< COIL >			
L101	1-414-234-11	INDUCTOR, FERRITE BEAD			
L102	1-414-234-11	INDUCTOR, FERRITE BEAD			
L103	1-414-234-11	INDUCTOR, FERRITE BEAD			
L104	1-216-001-00	METAL CHIP	10	5%	1/10W
L105	1-216-295-00	METAL CHIP	0	5%	1/10W
L106	1-414-234-11	INDUCTOR, FERRITE BEAD			
L107	1-216-295-00	METAL CHIP	0	5%	1/10W
L108	1-216-295-00	METAL CHIP	0	5%	1/10W
		< RESISTOR >			
R101	1-216-077-00	METAL CHIP	15K	5%	1/10W
R102	1-216-097-00	METAL CHIP	100K	5%	1/10W
R103	1-216-077-00	METAL CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R106	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R107	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R108	1-216-073-00	METAL CHIP	10K	5%	1/10W
R109	1-216-121-00	METAL CHIP	1M	5%	1/10W
R110	1-216-025-00	METAL CHIP	100	5%	1/10W
R112	1-216-049-00	METAL CHIP	1K	5%	1/10W
R122	1-216-295-00	METAL CHIP	0	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-00	METAL CHIP	100K	5%	1/10W
R125	1-216-049-00	METAL CHIP	1K	5%	1/10W
R126	1-216-049-00	METAL CHIP	1K	5%	1/10W
R127	1-216-049-00	METAL CHIP	1K	5%	1/10W
R131	1-216-037-00	METAL CHIP	330	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W
R181	1-216-053-00	METAL CHIP	1.5K	5%	1/10W

Ref. No.	Part No.	Description				Remark
R182	1-216-080-00	METAL CHIP	20K	5%	1/10W	
R183	1-216-080-00	METAL CHIP	20K	5%	1/10W	
R184	1-216-080-00	METAL CHIP	20K	5%	1/10W	
R185	1-216-080-00	METAL CHIP	20K	5%	1/10W	
R187	1-216-035-00	METAL CHIP	270	5%	1/10W	
R188	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R189	1-414-234-11	INDUCTOR, FERRITE BEAD				
		< SWITCH >				
S101	1-572-085-11	SWITCH, LEAF (LIMIT)				
		< VIBRATOR >				
X101	1-579-904-11	VIBRATOR, CRYSTAL (33.8MHz)				
**********						
*	1-651-117-11	CD LOWER BOARD				
		**********				
		< CAPACITOR >				
C251	1-124-903-11	ELECT	1uF	20%	50V	
C252	1-124-903-11	ELECT	1uF	20%	50V	
		< CONNECTOR >				
CN251	1-764-538-11	CONNECTOR, FFC/FPC 34P				
		< FLUORESCENT INDICATOR >				
FLD251	1-519-721-31	INDICATOR TUBE, FLUORESCENT				
		< RESISTOR >				
R251	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R252	1-247-836-11	CARBON	1.6K	5%	1/4W	
R253	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R254	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R255	1-249-426-11	CARBON	5.6K	5%	1/4W	
R256	1-247-856-00	CARBON	11K	5%	1/4W	
R257	1-249-435-11	CARBON	33K	5%	1/4W	
R264	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R265	1-247-836-11	CARBON	1.6K	5%	1/4W	
		< SWITCH >				
S251	1-554-303-21	SWITCH, TACTILE (PROGRAM)				
S252	1-554-303-21	SWITCH, TACTILE (SHUFFLE)				
S253	1-554-303-21	SWITCH, TACTILE (CONTINUE)				
S254	1-554-303-21	SWITCH, TACTILE (EDIT)				
S255	1-554-303-21	SWITCH, TACTILE (CLEAR)				
S256	1-554-303-21	SWITCH, TACTILE (CHECK)				
S257	1-554-303-21	SWITCH, TACTILE (MUSIC SCAN)				
S258	1-554-303-21	SWITCH, TACTILE (FADER)				
S266	1-554-303-21	SWITCH, TACTILE (REPEAT)				
S267	1-554-303-21	SWITCH, TACTILE (TIME)				
**********						
*	A-4369-185-A	CD MAIN BOARD, COMPLETE				
		**********				
	7-682-547-09	SCREW +BVTT 3X6 (S)				
		< CAPACITOR >				
C306	1-126-059-11	ELECT	10uF	20%	50V	
C307	1-126-163-11	ELECT	4.7uF	20%	50V	
C308	1-124-472-11	ELECT	470uF	20%	10V	
C309	1-124-473-11	ELECT	1000uF	20%	10V	
C311	1-126-300-11	ELECT	0.47uF	20%	50V	
C312	1-124-472-11	ELECT	470uF	20%	10V	
C314	1-126-059-11	ELECT	10uF	20%	50V	
C315	1-126-163-11	ELECT	4.7uF	20%	50V	
C317	1-126-163-11	ELECT	4.7uF	20%	50V	
C321	1-126-022-11	ELECT	47uF	20%	16V	
C322	1-161-494-00	CERAMIC	0.022uF		25V	
C323	1-161-494-00	CERAMIC	0.022uF		25V	
C327	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C328	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C329	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C341	1-126-376-11	ELECT	470uF	20%	25V	
C366	1-162-282-31	CERAMIC	100PF	10%	50V	
C371	1-162-284-31	CERAMIC	150PF	10%	50V	
C372	1-162-284-31	CERAMIC	150PF	10%	50V	
C373	1-162-284-31	CERAMIC	150PF	10%	50V	
C374	1-162-284-31	CERAMIC	150PF	10%	50V	
C375	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C376	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C377	1-130-472-00	MYLAR	0.0012uF	5%	50V	
C378	1-130-472-00	MYLAR	0.0012uF	5%	50V	
C379	1-124-443-00	ELECT	100uF	20%	10V	
C380	1-124-443-00	ELECT	100uF	20%	10V	
C381	1-162-291-31	CERAMIC	560PF	10%	50V	
C382	1-162-291-31	CERAMIC	560PF	10%	50V	
		< CONNECTOR >				
CN301	1-764-538-11	CONNECTOR, FFC/FPC 34P				
* CN303	1-568-943-11	PIN, CONNECTOR 5P				
CN305	1-750-997-11	CONNECTOR, FFC/FPC 5P				
CN306	1-764-415-11	CONNECTOR, FFC/FPC 26P				
* CN309	1-568-834-11	SOCKET, CONNECTOR 15P				
		< DIODE >				
D321	8-719-987-63	DIODE 1N4148M				
D341	8-719-010-42	DIODE UZ-5.6BSB				

CD MAIN | CD UPPER

Ref. No.	Part No.	Description				Remark
		< IC >				
IC302	8-759-061-65	IC LA5602				
IC304	8-759-805-37	IC L78LR05D				
IC305	8-759-605-00	IC M5F78M07L				
IC321	8-752-855-25	IC CXP82316-041Q				
IC341	8-759-172-31	IC BA6191				
IC371	8-759-145-58	IC UPC4558C				
IC372	8-759-145-58	IC UPC4558C				
		< COIL >				
JW346	1-412-473-21	INDUCTOR (SMALL)				
		< TRANSISTOR >				
Q302	8-729-900-65	TRANSISTOR DTA144ES				
Q303	8-729-900-89	TRANSISTOR DTC144ES				
Q321	8-729-900-89	TRANSISTOR DTC144ES				
Q322	8-729-119-78	TRANSISTOR 2SC403SP-51				
Q322	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q352	8-729-900-65	TRANSISTOR DTA144ES				
Q353	8-729-900-65	TRANSISTOR DTA144ES				
		< RESISTOR >				
R308	1-260-064-11	CARBON	1	5%	1/2W	
R321	1-249-429-11	CARBON	10K	5%	1/4W	
R322	1-249-429-11	CARBON	10K	5%	1/4W	
R323	1-249-417-11	CARBON	1K	5%	1/4W	F
R327	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R328	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R329	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R330	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R331	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R332	1-249-441-11	CARBON	100K	5%	1/4W	
R333	1-249-417-11	CARBON	1K	5%	1/4W	F
R334	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R335	1-249-429-11	CARBON	10K	5%	1/4W	
R336	1-249-429-11	CARBON	10K	5%	1/4W	
R338	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R339	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R340	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R341	1-247-876-11	CARBON	75K	5%	1/4W	
R342	1-247-876-11	CARBON	75K	5%	1/4W	
R343	1-247-876-11	CARBON	75K	5%	1/4W	
R344	1-247-876-11	CARBON	75K	5%	1/4W	
R345	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R346	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R347	1-249-415-11	CARBON	680	5%	1/4W	F
R348	1-247-834-11	CARBON	1.3K	5%	1/4W	
R359	1-249-417-11	CARBON	1K	5%	1/4W	F
R360	1-249-417-11	CARBON	1K	5%	1/4W	F
R363	1-249-417-11	CARBON	1K	5%	1/4W	F
R365	1-249-417-11	CARBON	1K	5%	1/4W	F
R366	1-249-417-11	CARBON	1K	5%	1/4W	F
R367	1-249-417-11	CARBON	1K	5%	1/4W	F
R368	1-249-417-11	CARBON	1K	5%	1/4W	F
R371	1-247-852-11	CARBON	7.5K	5%	1/4W	
R372	1-247-852-11	CARBON	7.5K	5%	1/4W	
R373	1-247-852-11	CARBON	7.5K	5%	1/4W	
R374	1-247-852-11	CARBON	7.5K	5%	1/4W	
R375	1-249-431-11	CARBON	15K	5%	1/4W	
R376	1-249-431-11	CARBON	15K	5%	1/4W	
R377	1-249-431-11	CARBON	15K	5%	1/4W	
R378	1-249-431-11	CARBON	15K	5%	1/4W	
R379	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R380	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R381	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R382	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R383	1-249-441-11	CARBON	100K	5%	1/4W	
R384	1-249-441-11	CARBON	100K	5%	1/4W	
R385	1-249-417-11	CARBON	1K	5%	1/4W	F
R386	1-249-417-11	CARBON	1K	5%	1/4W	F
R389	1-247-807-31	CARBON	100	5%	1/4W	
R390	1-247-807-31	CARBON	100	5%	1/4W	
		< VIBRATOR >				
X321	1-579-175-11	VIBRATOR, CERAMIC (10MHz)				
**********						
*	1-651-116-11	CD UPPER BOARD				
		**********				
		< RESISTOR >				
R258	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R259	1-247-836-11	CARBON	1.6K	5%	1/4W	
R260	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R261	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R262	1-249-426-11	CARBON	5.6K	5%	1/4W	
R263	1-247-856-00	CARBON	11K	5%	1/4W	
R266	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R267	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R268	1-249-426-11	CARBON	5.6K	5%	1/4W	
R269	1-247-856-00	CARBON	11K	5%	1/4W	
		< SWITCH >				
S259	1-554-303-21	SWITCH, TACTILE (⏮, ◀◀)				
S260	1-554-303-21	SWITCH, TACTILE (⏭, ▶▶)				
S261	1-554-303-21	SWITCH, TACTILE (▷)				
S262	1-554-303-21	SWITCH, TACTILE (❚❚)				
S263	1-554-303-21	SWITCH, TACTILE (■)				
S264	1-554-303-21	SWITCH, TACTILE (DISC SKIP)				

CD UPPER | FUSE | H.P | LEAF SW-A | LEAF SW-B | LOADING MOTOR | MAIN

Ref.No.	Part No.	Description	Remark
S265	1-554-303-21	SWITCH, TACTILE (△ OPEN/CLOSE)	
S268	1-554-303-21	SWITCH, TACTILE (1)	
S269	1-554-303-21	SWITCH, TACTILE (2)	
S270	1-554-303-21	SWITCH, TACTILE (3)	
S271	1-554-303-21	SWITCH, TACTILE (4)	
S272	1-554-303-21	SWITCH, TACTILE (5)	
**********			
*	1-652-388-21	FUSE BOARD (AEP, IT)	
		**********	
*	1-652-389-21	FUSE BOARD (E, AUS, MX, PX)	
		**********	
		< FUSE >	
⚠F101	1-532-286-00	FUSE, TIME-LAG (T2.5A)	
⚠F102	1-532-286-00	FUSE, TIME-LAG (T2.5A)	
⚠F103	1-532-299-00	FUSE, TIME-LAG (T5.0A)	
⚠F104	1-532-299-00	FUSE, TIME-LAG (T5.0A)	
**********			
*	1-651-166-21	H.P BOARD	
		*********	
		< CAPACITOR >	
C1237	1-162-282-31	CERAMIC 100PF 10% 50V (IT,G)	
C1238	1-162-282-31	CERAMIC 100PF 10% 50V (IT,G)	
		< JACK >	
J1203	1-569-003-11	JACK, LARGE TYPE (HEADPHONES)	
**********			
*	1-634-841-14	LEAF SW-A BOARD (RA12AL)	
		**********	
		< CONNECTOR >	
* CNP81	1-568-850-11	SOCKET, CONNECTOR 7P	
		< IC >	
IC81A	8-749-924-10	PHOTO REFLECTOR NJL5165K-B(H1)	
		< RESISTOR >	
R84	1-249-417-11	CARBON 1K 5% 1/4W F	
R85	1-249-408-11	CARBON 180 5% 1/4W F	
		< SWITCH >	
S81A	1-571-958-11	SWITCH, PUSH (1 KEY)(STOP DET)	
S82A	1-571-281-21	SWITCH, LEAF (CrO2 DET)	
S86A	1-571-281-21	SWITCH, LEAF (HALF DET)	

Ref.No.	Part No.	Description	Remark
**********			
*	1-634-841-14	LEAF SW-B BOARD (RB53A)	
		**********	
		< CONNECTOR >	
* CNP81	1-568-850-11	SOCKET, CONNECTOR 7P	
		< IC >	
IC81B	8-749-924-10	IC PHOTO REFLECTOR NJL5165K-B(H1)	
		< RESISTOR >	
R81	1-249-414-11	CARBON 560 5% 1/4W F	
R82	1-247-818-11	CARBON 300 5% 1/4W	
R83	1-247-834-11	CARBON 1.3K 5% 1/4W	
R84	1-249-417-11	CARBON 1K 5% 1/4W F	
R85	1-249-408-11	CARBON 180 5% 1/4W F	
		< SWITCH >	
S81B	1-571-958-11	SWITCH, PUSH (1 KEY)(STOP DET)	
S82B	1-571-281-21	SWITCH, LEAF (CrO2 DET)	
S84	1-571-281-21	SWITCH, LEAF (ERASE PROOF, SIDE A)	
S85	1-571-281-21	SWITCH, LEAF (ERASE PROOF, SIDE B)	
S86B	1-571-281-21	SWITCH, LEAF (HALF DET)	
**********			
*	1-638-730-11	LOADING MOTOR BOARD	
		**********	
		< CAPACITOR >	
C705	1-161-375-00	CERAMIC 0.0022uF 20% 50V	
		< MOTOR >	
M702	A-4604-834-A	MOTOR ASSY, LOADING	
**********			
*	A-4369-203-A	MAIN BOARD, COMPLETE (E, AUS, PX)	
		**********	
*	A-4371-220-A	MAIN BOARD, COMPLETE (MX)	
		**********	
*	A-4371-224-A	MAIN BOARD, COMPLETE (AEP)	
		**********	
*	A-4371-228-A	MAIN BOARD, COMPLETE (IT)	
		**********	
*	3-309-144-21	HEAT SINK	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C1	1-161-379-00	CERAMIC	0.01uF	20%	25V
C2	1-124-477-11	ELECT	47uF	20%	25V
C3	1-161-379-00	CERAMIC	0.01uF	20%	25V
C4	1-164-159-11	CERAMIC	0.1uF		50V
C5	1-164-159-11	CERAMIC	0.1uF		50V
C6	1-161-379-00	CERAMIC	0.01uF	20%	25V
C7	1-126-934-11	ELECT	220uF	20%	16V
C8	1-161-379-00	CERAMIC	0.01uF	20%	25V
C9	1-161-379-00	CERAMIC	0.01uF	20%	25V
C10	1-161-379-00	CERAMIC	0.01uF	20%	25V
C11	1-124-907-11	ELECT	10uF	20%	50V
C12	1-124-902-00	ELECT	0.47uF	20%	50V
C13	1-124-903-11	ELECT	1uF	20%	50V
C14	1-124-903-11	ELECT	1uF	20%	50V
C15	1-124-907-11	ELECT	10uF	20%	50V
C16	1-124-907-11	ELECT	10uF	20%	50V
C17	1-124-907-11	ELECT	10uF	20%	50V
C18	1-124-907-11	ELECT	10uF	20%	50V
C19	1-136-158-00	FILM	0.027uF	5%	50V (EXCEPT IT)
C19	1-136-159-00	FILM	0.033uF	5%	50V (IT)
C20	1-136-158-00	FILM	0.027uF	5%	50V (EXCEPT IT)
C20	1-136-159-00	FILM	0.033uF	5%	50V (IT)
C21	1-161-046-00	CERAMIC	0.0039uF	10%	25V
C22	1-161-046-00	CERAMIC	0.0039uF	10%	25V
C23	1-124-903-11	ELECT	1uF	20%	50V
C24	1-162-294-31	CERAMIC	0.001uF	10%	50V
C25	1-161-327-00	CERAMIC	0.0033uF	30%	16V
C26	1-124-477-11	ELECT	47uF	20%	25V
C27	1-126-962-11	ELECT	3.3uF	20%	50V
C28	1-161-494-00	CERAMIC	0.022uF		25V
C29	1-124-907-11	ELECT	10uF	20%	50V
C30	1-161-494-00	CERAMIC	0.022uF		25V
C31	1-101-005-00	CERAMIC	22000PF		50V
C32	1-162-196-31	CERAMIC	5.6PF	10%	50V (AEP)
C32	1-162-198-31	CERAMIC	8.2PF	10%	50V(EXCEPT AEP)
C33	1-161-379-00	CERAMIC	0.01uF	20%	25V
C34	1-164-159-11	CERAMIC	0.1uF		50V (AEP)
C37	1-161-374-11	CERAMIC	0.0015uF	20%	50V (AEP)
C38	1-102-120-00	CERAMIC	0.0018uF	10%	50V (AEP)
C39	1-101-005-00	CERAMIC	22000PF		50V (AEP)
C45	1-161-379-00	CERAMIC	0.01uF	20%	25V
C46	1-162-294-31	CERAMIC	0.001uF	10%	50V (AEP)
C51	1-102-961-00	CERAMIC	27PF	5%	50V
C52	1-102-961-00	CERAMIC	27PF	5%	50V
C53	1-124-477-11	ELECT	47uF	20%	25V
C54	1-161-379-00	CERAMIC	0.01uF	20%	25V
C55	1-161-379-00	CERAMIC	0.01uF	20%	25V
C56	1-161-379-00	CERAMIC	0.01uF	20%	25V
C57	1-161-379-00	CERAMIC	0.01uF	20%	25V
C58	1-161-379-00	CERAMIC	0.01uF	20%	25V
C61	1-124-925-11	ELECT	2.2uF	20%	100V
C62	1-124-463-00	ELECT	0.1uF	20%	50V
C63	1-161-379-00	CERAMIC	0.01uF	20%	25V
C64	1-161-379-00	CERAMIC	0.01uF	20%	25V
C65	1-126-934-11	ELECT	220uF	20%	16V
C67	1-161-379-00	CERAMIC	0.01uF	20%	25V
C71	1-136-173-00	FILM	0.47uF	5%	50V (AEP)
C72	1-161-494-00	CERAMIC	0.022uF		25V (AEP)
C73	1-124-463-00	ELECT	0.1uF	20%	50V (AEP)
C81	1-162-291-31	CERAMIC	560PF	10%	50V (AEP, IT)
C82	1-124-907-11	ELECT	10uF	20%	50V (AEP, IT)
C83	1-161-379-00	CERAMIC	0.01uF	20%	25V (AEP, IT)
C84	1-124-925-11	ELECT	2.2uF	20%	100V(AEP, IT)
C85	1-162-288-31	CERAMIC	330PF	10%	50V (AEP, IT)
C86	1-161-379-00	CERAMIC	0.01uF	20%	25V (AEP, IT)
C87	1-162-291-31	CERAMIC	560PF	10%	50V (AEP, IT)
C88	1-161-379-00	CERAMIC	0.01uF	20%	25V (AEP, IT)
C89	1-101-880-00	CERAMIC	47PF	5%	50V (AEP, IT)
C90	1-102-527-11	CERAMIC	82PF	5%	50V (AEP, IT)
C91	1-161-379-00	CERAMIC	0.01uF	20%	25V (AEP, IT)
C92	1-124-907-11	ELECT	10uF	20%	50V (AEP, IT)
C93	1-124-907-11	ELECT	10uF	20%	50V (AEP, IT)
C1001	1-162-286-31	CERAMIC	220PF	10%	50V (IT)
C1002	1-124-925-11	ELECT	2.2uF	20%	100V
C1003	1-162-282-31	CERAMIC	100PF	10%	50V (EXCEPT IT)
C1003	1-162-286-31	CERAMIC	220PF	10%	50V (IT)
C1011	1-162-286-31	CERAMIC	220PF	10%	50V (IT)
C1013	1-162-282-31	CERAMIC	100PF	10%	50V
C1014	1-124-927-11	ELECT	4.7uF	20%	100V
C1015	1-161-377-00	CERAMIC	0.0047uF	30%	16V
C1016	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C1017	1-124-464-11	ELECT	0.22uF	20%	50V
C1019	1-164-159-11	CERAMIC	0.1uF		50V
C1021	1-164-159-11	CERAMIC	0.1uF		50V
C1022	1-126-176-11	ELECT	220uF	20%	10V
C1023	1-124-443-00	ELECT	100uF	20%	10V
C1024	1-124-443-00	ELECT	100uF	20%	10V
C1026	1-137-364-11	FILM	0.001uF	5%	50V
C1027	1-137-375-11	FILM	0.068uF	5%	50V
C1028	1-124-903-11	ELECT	1uF	20%	50V
C1029	1-137-441-11	FILM	0.027uF	5%	50V
C1030	1-124-902-00	ELECT	0.47uF	20%	50V
C1031	1-137-370-11	FILM	0.01uF	5%	50V
C1032	1-136-168-00	FILM	0.18uF	5%	50V
C1033	1-137-436-11	FILM	0.0039uF	5%	50V
C1034	1-137-375-11	FILM	0.068uF	5%	50V
C1035	1-137-434-11	FILM	0.0018uF	5%	50V
C1036	1-130-489-00	MYLAR	0.033uF	5%	50V
C1037	1-137-363-91	FILM	680PF	5%	50V

Ref. No.	Part No.	Description			Remark
C1038	1-137-439-91	FILM	0.012uF	5%	50V
C1039	1-137-429-11	FILM	270PF	5%	50V
C1040	1-137-368-11	FILM	0.0047uF	5%	50V
C1041	1-124-907-11	ELECT	10uF	20%	50V
C1042	1-164-159-11	CERAMIC	0.1uF		50V
C1045	1-164-159-11	CERAMIC	0.1uF		50V
C1046	1-164-159-11	CERAMIC	0.1uF		50V
C1047	1-164-159-11	CERAMIC	0.1uF		50V
C1048	1-164-159-11	CERAMIC	0.1uF		50V
C1049	1-164-159-11	CERAMIC	0.1uF		50V
C1050	1-164-159-11	CERAMIC	0.1uF		50V
C1051	1-162-286-31	CERAMIC	220PF	10%	50V (IT)
C1052	1-124-925-11	ELECT	2.2uF	20%	100V
C1053	1-162-282-31	CERAMIC	100PF	10%	50V (EXCEPT IT)
C1053	1-162-286-31	CERAMIC	220PF	10%	50V (IT)
C1061	1-162-286-31	CERAMIC	220PF	10%	50V (IT)
C1063	1-162-282-31	CERAMIC	100PF	10%	50V
C1064	1-124-927-11	ELECT	4.7uF	20%	100V
C1065	1-161-377-00	CERAMIC	0.0047uF	30%	16V
C1066	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C1067	1-124-464-11	ELECT	0.22uF	20%	50V
C1069	1-164-159-11	CERAMIC	0.1uF		50V
C1071	1-164-159-11	CERAMIC	0.1uF		50V
C1072	1-126-176-11	ELECT	220uF	20%	10V
C1073	1-124-443-00	ELECT	100uF	20%	10V
C1074	1-124-443-00	ELECT	100uF	20%	10V
C1076	1-137-364-11	FILM	0.001uF	5%	50V
C1077	1-137-375-11	FILM	0.068uF	5%	50V
C1078	1-124-903-11	ELECT	1uF	20%	50V
C1079	1-137-441-11	FILM	0.027uF	5%	50V
C1080	1-124-902-00	ELECT	0.47uF	20%	50V
C1081	1-137-370-11	FILM	0.01uF	5%	50V
C1082	1-136-168-00	FILM	0.18uF	5%	50V
C1083	1-137-436-11	FILM	0.0039uF	5%	50V
C1084	1-137-375-11	FILM	0.068uF	5%	50V
C1085	1-137-434-11	FILM	0.0018uF	5%	50V
C1086	1-130-489-00	MYLAR	0.033uF	5%	50V
C1087	1-137-363-91	FILM	680PF	5%	50V
C1088	1-137-439-91	FILM	0.012uF	5%	50V
C1089	1-137-429-11	FILM	270PF	5%	50V
C1090	1-137-368-11	FILM	0.0047uF	5%	50V
C1091	1-124-907-11	ELECT	10uF	20%	50V
C1301	1-126-974-11	ELECT	3300uF	20%	50V
C1302	1-126-974-11	ELECT	3300uF	20%	50V
C1303	1-136-169-00	FILM	0.22uF	5%	50V
C1305	1-124-564-11	ELECT	4700uF	20%	25V
C1306	1-124-564-11	ELECT	4700uF	20%	25V
C1307	1-164-159-11	CERAMIC	0.1uF		50V
C1313	1-126-176-11	ELECT	220uF	20%	10V
C1314	1-126-176-11	ELECT	220uF	20%	10V
C1315	1-124-907-11	ELECT	10uF	20%	50V
C1316	1-124-907-11	ELECT	10uF	20%	50V
C1317	1-124-907-11	ELECT	10uF	20%	50V
C1318	1-124-907-11	ELECT	10uF	20%	50V
C1331	1-126-927-11	ELECT	2200uF	20%	6.3V
C1333	1-124-907-11	ELECT	10uF	20%	50V
C1335	1-164-159-11	CERAMIC	0.1uF		50V (IT)
C1336	1-164-159-11	CERAMIC	0.1uF		50V (IT)
C1337	1-161-379-00	CERAMIC	0.01uF	20%	25V (IT)
C1341	1-126-176-11	ELECT	220uF	20%	10V
C1342	1-126-176-11	ELECT	220uF	20%	10V
C1343	1-124-925-11	ELECT	2.2uF	20%	100V
C1344	1-124-443-00	ELECT	100uF	20%	10V
C1349	1-124-916-11	ELECT	22uF	20%	63V (AEP)
C1350	1-124-916-11	ELECT	22uF	20%	63V (AEP)
C1353	1-136-169-00	FILM	0.22uF	5%	50V
C1357	1-164-159-11	CERAMIC	0.1uF		50V
C1371	1-124-122-11	ELECT	100uF	20%	50V (E, AUS, MX, PX)
C1372	1-124-122-11	ELECT	100uF	20%	50V (E, AUS, MX, PX)
C1373	1-126-105-11	ELECT	1000uF	20%	35V (E, AUS, MX, PX)
C1374	1-124-478-11	ELECT	100uF	20%	25V
C1375	1-124-477-11	ELECT	47uF	20%	25V
C1385	1-164-159-11	CERAMIC	0.1uF		50V (IT)
C1386	1-164-159-11	CERAMIC	0.1uF		50V (IT)
C1387	1-161-379-00	CERAMIC	0.01uF	20%	25V (IT)

< FILTER >

CF1	1-567-389-11	FILTER, CERAMIC
CF2	1-567-389-11	FILTER, CERAMIC
CF3	1-567-389-11	FILTER, CERAMIC (IT)
CF4	1-527-981-00	FILTER, CERAMIC
CF5	1-577-075-11	OSCILLATOR, CERAMIC
CF6	1-760-220-11	FILTER, CERAMIC

< CONNECTOR >

* CN1	1-568-834-11	SOCKET, CONNECTOR 15P (AEP, IT)
* CN1	1-568-830-11	SOCKET, CONNECTOR 11P (E, AUS, MX, PX)
* CN1301	1-564-509-11	PLUG, CONNECTOR 6P
CN1302	1-568-934-21	PIN, CONNECTOR 7P (E, AUS, MX, PX)
* CN1302	1-568-935-11	PIN, CONNECTOR 8P (AEP, IT)
CN1303	1-564-508-11	PLUG, CONNECTOR 5P
CN1304	1-750-430-11	CONNECTOR, FFC/FPC 25P
CN1305	1-564-508-21	PLUG, CONNECTOR 5P
* CN1308	1-566-210-11	PIN, CONNECTOR 3P (POWER SOURCE) (AEP)

< COMPOSITION CIRCUIT BLOCK >

CP1001	1-239-053-11	COMPOSITION CIRCUIT BLOCK 1M

MAIN

Ref. No.	Part No.	Description	Remark
CP1051	1-239-053-11	COMPOSITION CIRCUIT BLOCK 1M	
		< DIODE >	
D1	8-719-987-63	DIODE 1N4148M	
D1203	8-719-987-63	DIODE 1N4148M	
D1301	8-719-510-68	DIODE D5SBA20F01	
D1304	8-719-200-82	DIODE 11ES2	
D1305	8-719-200-82	DIODE 11ES2	
D1306	8-719-200-82	DIODE 11ES2	
D1307	8-719-200-82	DIODE 11ES2	
D1313	8-719-200-82	DIODE 11ES2	
D1314	8-719-200-82	DIODE 11ES2	
D1315	8-719-987-63	DIODE 1N4148M	
D1316	8-719-200-82	DIODE 11ES2	
D1317	8-719-200-82	DIODE 11ES2	
D1318	8-719-987-63	DIODE 1N4148M	
D1319	8-719-200-82	DIODE 11ES2	
D1320	8-719-200-82	DIODE 11ES2	
D1321	8-719-200-82	DIODE 11ES2	
D1322	8-719-200-82	DIODE 11ES2	
D1323	8-719-200-82	DIODE 11ES2	
D1324	8-719-200-82	DIODE 11ES2	
D1325	8-719-200-82	DIODE 11ES2	
D1326	8-719-200-82	DIODE 11ES2	
D1331	8-719-200-82	DIODE 11ES2	
D1333	8-719-200-82	DIODE 11ES2	
D1335	8-719-200-82	DIODE 11ES2	
D1336	8-719-200-82	DIODE 11ES2	
D1337	8-719-987-63	DIODE 1N4148M	
D1341	8-719-987-63	DIODE 1N4148M	
D1342	8-719-987-63	DIODE 1N4148M	
D1343	8-719-987-63	DIODE 1N4148M	
D1371	8-719-200-82	DIODE 11ES2 (E, AUS, MX, PX)	
D1372	8-719-200-82	DIODE 11ES2 (E, AUS, MX, PX)	
D1373	8-719-200-82	DIODE 11ES2 (E, AUS, MX, PX)	
D1374	8-719-200-82	DIODE 11ES2 (E, AUS, MX, PX)	
D1375	8-719-001-42	DIODE UZL-11M1	
		< FRONT END >	
FE1	1-465-007-11	FRONT END (4 GANG) (IT)	
FE1	1-693-090-31	FRONT END (FM) (2 GANG) (EXCEPT IT)	
FE2	1-239-260-11	ENCAPSULATED COMPONENT (EXCEPT AEP)	
FE2	1-239-876-11	ENCAPSULATED COMPONENT (AEP)	
FE3	1-236-463-11	ENCAPSULATED COMPONENT (AEP)	
		< IC >	
IC1	8-759-176-03	IC LA1835	
IC51	8-759-175-87	IC LC7218-ST	
IC81	8-759-145-58	IC UPC4558C (AEP, IT)	
IC82	8-759-169-99	IC SAA6579 (AEP, IT)	
IC83	8-759-062-26	IC LC7073 (AEP, IT)	
IC1001	8-759-634-51	IC M5218AP	
IC1002	8-759-000-48	IC MC14052BCP	
IC1003	8-759-140-53	IC UPD4053BC	
IC1004	8-759-634-51	IC M5218AP	
IC1005	8-759-081-01	IC NJU7305L	
IC1006	8-759-633-78	IC M5289P	
IC1056	8-759-633-78	IC M5289P	
IC1301	8-759-605-00	IC M5F78M07L	
IC1302	8-759-604-95	IC M5F79M07L	
IC1303	8-759-604-84	IC M5F7806L	
IC1304	8-759-604-39	IC M5F78M12 (AEP)	
IC1341	8-759-111-68	IC UPC1237HA	
		< IFT >	
IFT1	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)	
		< JACK >	
* J1001	1-580-912-21	JACK, PIN 4P (PHONO/VIDEO)	
* J1202	1-569-130-11	JACK, PIN 2P (SURROUND SPEAKER)	
		< COIL >	
L1	1-407-500-00	INDUCTOR 4.7mH (AEP)	
L1	1-410-688-31	INDUCTOR 1.5mH (IT, E, AUS, MX, PX)	
L2	1-410-525-11	INDUCTOR 220uH (AEP)	
L81	1-410-521-11	INDUCTOR 100uH (AEP, IT)	
L1301	1-420-872-00	COIL, AIR-CORE	
L1351	1-420-872-00	COIL, AIR-CORE	
		< FILTER >	
LPF1	1-239-597-11	FILTER, LOW PASS	
LPF2	1-239-597-11	FILTER, LOW PASS	
		< TRANSISTOR >	
Q1	8-729-230-XX	TRANSISTOR 2SC2669OY-TPE4	
Q2	8-729-230-XX	TRANSISTOR 2SC2669OY-TPE4 (IT)	
Q3	8-729-119-76	TRANSISTOR 2SA1175-HFE (AEP)	
Q4	8-729-119-76	TRANSISTOR 2SA1175-HFE (AEP)	
Q5	8-729-900-80	TRANSISTOR DTC114ES (AEP)	
Q6	8-729-900-80	TRANSISTOR DTC114ES (AEP)	
Q7	8-729-900-80	TRANSISTOR DTC114ES (AEP)	
Q8	8-729-900-80	TRANSISTOR DTC114ES (AEP)	
Q55	8-729-900-61	TRANSISTOR DTA114ES	
Q61	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q62	8-729-201-84	TRANSISTOR 2SC3112-B	
Q71	8-729-202-67	TRANSISTOR 2SK246-GR3 (AEP)	
Q72	8-729-201-84	TRANSISTOR 2SC3112-B (AEP)	
Q1031	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1081	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1341	8-729-900-63	TRANSISTOR DTA124ES	

Ref. No.	Part No.	Description				Remark
Q1370	8-729-900-36	TRANSISTOR	DTC124ES (AEP, IT)			
Q1371	8-729-209-15	TRANSISTOR	2SD2012			
		< RESISTOR >				
R1	1-249-411-11	CARBON	330	5%	1/4W	
R2	1-249-411-11	CARBON	330	5%	1/4W	
R3	1-249-409-11	CARBON	220	5%	1/4W F	
⚠R4	1-249-402-11	CARBON	56	5%	1/4W F	
R5	1-247-891-00	CARBON	330K	5%	1/4W	
R6	1-249-411-11	CARBON	330	5%	1/4W	
R7	1-247-891-00	CARBON	330K	5%	1/4W	(IT)
R8	1-249-411-11	CARBON	330	5%	1/4W	(IT)
⚠R9	1-249-405-11	CARBON	100	5%	1/4W F	
R10	1-249-437-11	CARBON	47K	5%	1/4W	
R12	1-249-429-11	CARBON	10K	5%	1/4W	
R13	1-249-442-11	CARBON	510	5%	1/4W	
⚠R14	1-249-403-11	CARBON	68	5%	1/4W F	
R16	1-249-429-11	CARBON	10K	5%	1/4W	
R17	1-247-842-11	CARBON	3K	5%	1/4W	
R18	1-249-429-11	CARBON	10K	5%	1/4W	
R19	1-249-441-11	CARBON	100K	5%	1/4W	
R20	1-249-435-11	CARBON	33K	5%	1/4W	
R21	1-249-441-11	CARBON	100K	5%	1/4W	
R22	1-249-437-11	CARBON	47K	5%	1/4W	
R23	1-249-399-11	CARBON	33	5%	1/4W F	
R24	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP)
R25	1-249-429-11	CARBON	10K	5%	1/4W	(AEP)
R26	1-249-429-11	CARBON	10K	5%	1/4W	(AEP)
R27	1-249-429-11	CARBON	10K	5%	1/4W	(AEP)
R30	1-249-429-11	CARBON	10K	5%	1/4W	(AEP)
R31	1-249-429-11	CARBON	10K	5%	1/4W	(AEP)
R32	1-249-433-11	CARBON	22K	5%	1/4W	(AEP)
R33	1-247-903-00	CARBON	1M	5%	1/4W	(AEP)
R34	1-249-437-11	CARBON	47K	5%	1/4W	(AEP)
R35	1-249-423-11	CARBON	3.3K	5%	1/4W F	
R36	1-249-423-11	CARBON	3.3K	5%	1/4W F	
R45	1-249-426-11	CARBON	5.6K	5%	1/4W	
R46	1-249-426-11	CARBON	5.6K	5%	1/4W	
R47	1-249-408-11	CARBON	180	5%	1/4W F	(AEP, IT)
R48	1-249-429-11	CARBON	10K	5%	1/4W	
R49	1-249-423-11	CARBON	3.3K	5%	1/4W F	
⚠R50	1-249-401-11	CARBON	47	5%	1/4W F	
R51	1-249-417-11	CARBON	1K	5%	1/4W F	
R52	1-249-417-11	CARBON	1K	5%	1/4W F	
R53	1-249-417-11	CARBON	1K	5%	1/4W F	
R54	1-249-417-11	CARBON	1K	5%	1/4W F	
R56	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R57	1-249-417-11	CARBON	1K	5%	1/4W F	
R58	1-249-417-11	CARBON	1K	5%	1/4W F	
⚠R60	1-249-405-11	CARBON	100	5%	1/4W F	

Ref. No.	Part No.	Description				Remark
R61	1-249-423-11	CARBON	3.3K	5%	1/4W F	
R62	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R63	1-249-414-11	CARBON	560	5%	1/4W F	
R64	1-249-417-11	CARBON	1K	5%	1/4W F	
R65	1-249-410-11	CARBON	270	5%	1/4W F	
R66	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R67	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R68	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R69	1-247-807-31	CARBON	100	5%	1/4W	
R71	1-249-423-11	CARBON	3.3K	5%	1/4W F	(AEP)
R72	1-249-433-11	CARBON	22K	5%	1/4W	(AEP)
R73	1-249-414-11	CARBON	560	5%	1/4W F	(AEP)
R74	1-249-417-11	CARBON	1K	5%	1/4W F	(AEP)
R75	1-249-410-11	CARBON	270	5%	1/4W F	(AEP)
R76	1-249-421-11	CARBON	2.2K	5%	1/4W F	(AEP)
R77	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP)
R78	1-247-807-31	CARBON	100	5%	1/4W	(AEP)
R81	1-249-441-11	CARBON	100K	5%	1/4W	(AEP, IT)
R82	1-249-441-11	CARBON	100K	5%	1/4W	(AEP, IT)
R83	1-249-433-11	CARBON	22K	5%	1/4W	(AEP, IT)
R84	1-249-426-11	CARBON	5.6K	5%	1/4W	(AEP, IT)
R85	1-249-421-11	CARBON	2.2K	5%	1/4W F	(AEP, IT)
R86	1-249-429-11	CARBON	10K	5%	1/4W	(AEP, IT)
R1001	1-249-417-11	CARBON	1K	5%	1/4W F	
R1002	1-247-903-00	CARBON	1M	5%	1/4W	
R1011	1-249-417-11	CARBON	1K	5%	1/4W F	(IT)
R1012	1-249-417-11	CARBON	1K	5%	1/4W F	
R1013	1-249-437-11	CARBON	47K	5%	1/4W	
R1014	1-249-416-11	CARBON	820	5%	1/4W F	
R1015	1-247-897-11	CARBON	560K	5%	1/4W	
R1016	1-249-437-11	CARBON	47K	5%	1/4W	
R1017	1-249-409-11	CARBON	220	5%	1/4W F	
R1018	1-249-441-11	CARBON	100K	5%	1/4W	
R1021	1-249-437-11	CARBON	47K	5%	1/4W	
R1023	1-249-437-11	CARBON	47K	5%	1/4W	
R1024	1-249-427-11	CARBON	6.8K	5%	1/4W F	
R1025	1-249-441-11	CARBON	100K	5%	1/4W	
R1026	1-249-427-11	CARBON	6.8K	5%	1/4W F	
R1031	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP)
R1036	1-249-427-11	CARBON	6.8K	5%	1/4W F	
R1038	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R1039	1-249-441-11	CARBON	100K	5%	1/4W	
R1040	1-247-889-00	CARBON	270K	5%	1/4W	
R1041	1-249-433-11	CARBON	22K	5%	1/4W	
R1042	1-249-433-11	CARBON	22K	5%	1/4W	
R1043	1-249-433-11	CARBON	22K	5%	1/4W	
R1044	1-249-433-11	CARBON	22K	5%	1/4W	
R1045	1-249-413-11	CARBON	470	5%	1/4W F	
R1046	1-249-413-11	CARBON	470	5%	1/4W F	
R1047	1-249-413-11	CARBON	470	5%	1/4W F	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN | MAIN TC

Ref. No.	Part No.	Description				Remark
R1048	1-249-429-11	CARBON	10K	5%	1/4W	
R1051	1-249-417-11	CARBON	1K	5%	1/4W	F
R1052	1-247-903-00	CARBON	1M	5%	1/4W	
R1061	1-249-417-11	CARBON	1K	5%	1/4W	F (IT)
R1062	1-249-417-11	CARBON	1K	5%	1/4W	F
R1063	1-249-437-11	CARBON	47K	5%	1/4W	
R1064	1-249-416-11	CARBON	820	5%	1/4W	F
R1065	1-247-897-11	CARBON	560K	5%	1/4W	
R1066	1-249-437-11	CARBON	47K	5%	1/4W	
R1067	1-249-409-11	CARBON	220	5%	1/4W	F
R1068	1-249-441-11	CARBON	100K	5%	1/4W	
R1071	1-249-437-11	CARBON	47K	5%	1/4W	
R1073	1-249-437-11	CARBON	47K	5%	1/4W	
R1074	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R1075	1-249-441-11	CARBON	100K	5%	1/4W	
R1076	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R1086	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R1088	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1089	1-249-441-11	CARBON	100K	5%	1/4W	
R1090	1-247-889-00	CARBON	270K	5%	1/4W	
R1313	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1314	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1335	1-249-389-11	CARBON	4.7	5%	1/4W	F (IT)
R1336	1-249-389-11	CARBON	4.7	5%	1/4W	F (IT)
R1341	1-249-429-11	CARBON	10K	5%	1/4W	
R1342	1-249-441-11	CARBON	100K	5%	1/4W	
R1343	1-249-436-11	CARBON	39K	5%	1/4W	
R1344	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R1345	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R1346	1-249-438-11	CARBON	56K	5%	1/4W	
R1347	1-249-437-11	CARBON	47K	5%	1/4W	
R1348	1-249-429-11	CARBON	10K	5%	1/4W	
R1349	1-249-429-11	CARBON	10K	5%	1/4W	
R1363	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1364	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1370	1-249-417-11	CARBON	1K	5%	1/4W	F (AEP, IT)
R1371	1-249-423-11	CARBON	3.3K	5%	1/4W	F
⚠R1380	1-215-891-11	METAL OXIDE	680	5%	2W	F(AEP, IT, MX)
⚠R1380	1-216-456-00	METAL OXIDE	820	5%	2W	F (E, AUS, PX)
R1381	1-249-410-11	CARBON	270	5%	1/4W	F
R1382	1-249-410-11	CARBON	270	5%	1/4W	F
R1383	1-249-410-11	CARBON	270	5%	1/4W	F
R1384	1-249-410-11	CARBON	270	5%	1/4W	F
R1385	1-249-389-11	CARBON	4.7	5%	1/4W	F (IT)
R1386	1-249-389-11	CARBON	4.7	5%	1/4W	F (IT)
		< VARIABLE RESISTOR >				
RV1	1-241-765-11	RES, ADJ, CARBON	22K			
RV2	1-241-630-11	RES, ADJ, CARBON	10K			

Ref. No.	Part No.	Description	Remark
		< RELAY >	
RY1201	1-515-920-11	RELAY (24V)	
		< TERMINAL >	
* TM1	1-537-264-11	TERMINAL BOARD (ANTENNA)	(E, AUS, MX, PX)
* TM1	1-537-288-11	TERMINAL BOARD, ANTENNA (PAL)	(ANTENNA) (AEP, IT)
* TM1301	1-537-327-21	TERMINAL BOARD (SPEAKER)	
		< VIBRATOR >	
X1	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)	(AEP, IT)
X2	1-577-358-21	VIBRATOR, CERAMIC (4MHz)	(AEP, IT)
XT51	1-577-126-21	VIBRATOR, CRYSTAL (7.2MHz)	
**********			
*	A-4365-875-A	MAIN TC BOARD, COMPLETE	
		**********	
*	4-942-204-01	PLATE, GROUND	
		< CAPACITOR >	

C722	1-137-368-11	FILM	0.0047uF	5%	50V
C723	1-162-291-31	CERAMIC	560PF	10%	50V
C726	1-136-165-11	FILM	0.1uF	5%	50V
C727	1-126-791-11	ELECT	10uF	20%	35V
C728	1-124-903-11	ELECT	1uF	20%	50V
C729	1-124-465-00	ELECT	0.47uF	20%	50V
C730	1-124-907-11	ELECT	10uF	20%	50V
C731	1-164-159-11	CERAMIC	0.1uF		50V
C732	1-126-791-11	ELECT	10uF	20%	35V
C741	1-124-903-11	ELECT	1uF	20%	50V
C742	1-126-791-11	ELECT	10uF	20%	35V
C822	1-137-368-11	FILM	0.0047uF	5%	50V
C823	1-162-291-31	CERAMIC	560PF	10%	50V
C826	1-136-165-11	FILM	0.1uF	5%	50V
C827	1-124-907-11	ELECT	10uF	20%	50V
C828	1-124-903-11	ELECT	1uF	20%	50V
C829	1-124-902-00	ELECT	0.47uF	20%	50V
C830	1-124-907-11	ELECT	10uF	20%	50V
C831	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C832	1-161-375-00	CERAMIC	0.0022uF	20%	50V
C833	1-124-902-00	ELECT	0.47uF	20%	50V
C841	1-124-903-11	ELECT	1uF	20%	50V
C842	1-124-907-11	ELECT	10uF	20%	50V
C901	1-124-443-00	ELECT	100uF	20%	10V
C902	1-124-471-00	ELECT	1000uF	20%	6.3V
C903	1-124-443-00	ELECT	100uF	20%	10V
C910	1-124-907-11	ELECT	10uF	20%	50V
C911	1-124-907-11	ELECT	10uF	20%	50V
C912	1-124-120-11	ELECT	220uF	20%	25V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description				Remark
C914	1-124-584-00	ELECT	100uF	20%	10V	
C916	1-124-443-00	ELECT	100uF	20%	10V	
C917	1-124-443-00	ELECT	100uF	20%	10V	
C918	1-124-443-00	ELECT	100uF	20%	10V	
C956	1-162-290-31	CERAMIC	470PF	10%	50V	
C957	1-162-290-31	CERAMIC	470PF	10%	50V	
C958	1-164-159-11	CERAMIC	0.1uF		50V	
C959	1-164-159-11	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
* CN901	1-568-945-11	PIN, CONNECTOR 7P				
CN902	1-564-520-11	PLUG, CONNECTOR 5P				
CN904	1-564-517-11	PLUG, CONNECTOR 2P				
CN905	1-580-783-11	CONNECTOR, BOARD TO BOARD				
CN906	1-580-783-11	CONNECTOR, BOARD TO BOARD				
CN907	1-580-783-11	CONNECTOR, BOARD TO BOARD				
* CN908	1-568-850-11	SOCKET, CONNECTOR 7P				
* CN909	1-568-850-11	SOCKET, CONNECTOR 7P				
* CN910	1-568-852-11	SOCKET, CONNECTOR 9P				
* CN911	1-568-856-11	SOCKET, CONNECTOR 13P				
		< DIODE >				
D901	8-719-987-63	DIODE	1N4148M			
D902	8-719-987-63	DIODE	1N4148M			
D903	8-719-987-63	DIODE	1N4148M			
		< IC >				
IC901	8-759-098-75	IC	HA12171NT			
IC902	8-759-250-60	IC	M50964-261FP			
IC903	8-759-635-63	IC	M51943BSL			
IC904	8-759-266-35	IC	TA8242K			
		< TRANSISTOR >				
Q701	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q801	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q901	8-729-900-65	TRANSISTOR	DTA144ES			
Q902	8-729-900-89	TRANSISTOR	DTC144ES			
Q903	8-729-900-89	TRANSISTOR	DTC144ES			
Q904	8-729-900-65	TRANSISTOR	DTA144ES			
Q905	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q906	8-729-801-84	TRANSISTOR	2SB1013-4			
Q907	8-729-801-84	TRANSISTOR	2SB1013-4			
Q908	8-729-900-65	TRANSISTOR	DTA144ES			
Q909	8-729-900-89	TRANSISTOR	DTC144ES			
Q910	8-729-900-65	TRANSISTOR	DTA144ES			
		< RESISTOR >				
R720	1-215-451-00	METAL	18K	1%	1/6W	
R721	1-249-430-11	CARBON	12K	5%	1/4W	
R722	1-249-431-11	CARBON	15K	5%	1/4W	

Ref.No.	Part No.	Description				Remark
R723	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R724	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R725	1-249-429-11	CARBON	10K	5%	1/4W	
R727	1-249-429-11	CARBON	10K	5%	1/4W	
R730	1-249-429-11	CARBON	10K	5%	1/4W	
R731	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R732	1-249-429-11	CARBON	10K	5%	1/4W	
R733	1-249-429-11	CARBON	10K	5%	1/4W	
R734	1-249-429-11	CARBON	10K	5%	1/4W	
R735	1-247-864-11	CARBON	24K	5%	1/4W	
R736	1-249-429-11	CARBON	10K	5%	1/4W	
R737	1-249-429-11	CARBON	10K	5%	1/4W	
R738	1-249-429-11	CARBON	10K	5%	1/4W	
R741	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R742	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R743	1-247-840-00	CARBON	2.4K	5%	1/4W	
R744	1-249-433-11	CARBON	22K	5%	1/4W	
R745	1-249-417-11	CARBON	1K	5%	1/4W	F
R821	1-249-430-11	CARBON	12K	5%	1/4W	
R822	1-249-431-11	CARBON	15K	5%	1/4W	
R823	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R824	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R825	1-247-882-11	CARBON	130K	5%	1/4W	
R826	1-247-866-11	CARBON	30K	5%	1/4W	
R829	1-249-429-11	CARBON	10K	5%	1/4W	
R830	1-249-432-11	CARBON	18K	5%	1/4W	
R831	1-247-885-00	CARBON	180K	5%	1/4W	
R841	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R842	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R843	1-247-840-00	CARBON	2.4K	5%	1/4W	
R844	1-249-433-11	CARBON	22K	5%	1/4W	
R845	1-249-417-11	CARBON	1K	5%	1/4W	F
R901	1-247-807-31	CARBON	100	5%	1/4W	
R902	1-249-389-11	CARBON	4.7	5%	1/4W	F
R907	1-249-429-11	CARBON	10K	5%	1/4W	
R908	1-247-903-00	CARBON	1M	5%	1/4W	
R909	1-247-895-00	CARBON	470K	5%	1/4W	
R910	1-247-895-00	CARBON	470K	5%	1/4W	
R911	1-249-410-11	CARBON	270	5%	1/4W	F
R912	1-249-410-11	CARBON	270	5%	1/4W	F
R914	1-249-411-11	CARBON	330	5%	1/4W	
R915	1-249-411-11	CARBON	330	5%	1/4W	
R917	1-249-411-11	CARBON	330	5%	1/4W	
R918	1-249-417-11	CARBON	1K	5%	1/4W	F
R919	1-249-429-11	CARBON	10K	5%	1/4W	
R920	1-249-429-11	CARBON	10K	5%	1/4W	
R921	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R922	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R923	1-249-429-11	CARBON	10K	5%	1/4W	
R926	1-249-429-11	CARBON	10K	5%	1/4W	

MAIN TC MD-A

Ref. No.	Part No.	Description				Remark
R927	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R928	1-249-429-11	CARBON	10K	5%	1/4W	
R929	1-249-415-11	CARBON	680	5%	1/4W	F
R930	1-249-414-11	CARBON	560	5%	1/4W	F
R931	1-249-415-11	CARBON	680	5%	1/4W	F
R932	1-249-429-11	CARBON	10K	5%	1/4W	
R933	1-249-415-11	CARBON	680	5%	1/4W	F
R934	1-249-429-11	CARBON	10K	5%	1/4W	
R935	1-249-415-11	CARBON	680	5%	1/4W	F
R936	1-249-429-11	CARBON	10K	5%	1/4W	
R937	1-249-429-11	CARBON	10K	5%	1/4W	
R938	1-249-429-11	CARBON	10K	5%	1/4W	
R939	1-249-429-11	CARBON	10K	5%	1/4W	
R940	1-249-429-11	CARBON	10K	5%	1/4W	
R941	1-249-429-11	CARBON	10K	5%	1/4W	
R942	1-249-441-11	CARBON	100K	5%	1/4W	
R943	1-249-441-11	CARBON	100K	5%	1/4W	
R958	1-247-807-31	CARBON	100	5%	1/4W	
R959	1-249-381-11	CARBON	1	5%	1/4W	F
R960	1-249-381-11	CARBON	1	5%	1/4W	F
R968	1-247-807-31	CARBON	100	5%	1/4W	
R969	1-249-381-11	CARBON	1	5%	1/4W	F
R970	1-249-381-11	CARBON	1	5%	1/4W	F
R971	1-249-429-11	CARBON	10K	5%	1/4W	
R972	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R973	1-249-434-11	CARBON	27K	5%	1/4W	
R974	1-249-429-11	CARBON	10K	5%	1/4W	
R976	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R977	1-249-434-11	CARBON	27K	5%	1/4W	

< VARIABLE RESISTOR >

RV701	1-230-496-11	RES, ADJ, CARBON 10K	
RV801	1-230-496-11	RES, ADJ, CARBON 10K	

< VIBRATOR >

X901	1-577-358-21	VIBRATOR, CERAMIC (4MHz)	

****

* A-2006-609-A MD-A BOARD, COMPLETE (RA12AL)

****

< CAPACITOR >

C11	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C12	1-136-157-00	FILM	0.022uF	5%	50V
C13	1-124-234-00	ELECT	22uF	20%	16V
C18	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C21	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C22	1-136-157-00	FILM	0.022uF	5%	50V
C23	1-124-234-00	ELECT	22uF	20%	16V

Ref. No.	Part No.	Description				Remark
C28	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C31	1-124-234-00	ELECT	22uF	20%	16V	
C32	1-124-234-00	ELECT	22uF	20%	16V	
C72	1-124-499-11	ELECT, NONPOLAR	1uF	20%	50V	

< CONNECTOR >

* CNJ31	1-580-782-11	CONNECTOR, BOARD TO BOARD	
* CNJ72	1-580-902-11	CONNECTOR, FFC/FPC	
* CNP32	1-580-772-11	PIN, CONNECTOR (PC BOARD) 4P	
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	

< IC >

IC31A	8-759-106-02	IC UPC4570G2	

< JUMPER RESISTOR >

JW1	1-216-295-00	METAL CHIP	0	5%	1/10W
JW51	1-216-296-91	METAL GLAZE	0	5%	1/8W
JW52	1-216-296-91	METAL GLAZE	0	5%	1/8W
JW53	1-216-296-91	METAL GLAZE	0	5%	1/8W
JW54	1-216-296-91	METAL GLAZE	0	5%	1/8W

< TRANSISTOR >

Q71A	8-729-206-36	TRANSISTOR	2SA1602-EF

< RESISTOR >

R11	1-216-099-00	METAL CHIP	120K	5%	1/10W
R12	1-216-025-00	METAL CHIP	100	5%	1/10W
R13	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R14	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R21	1-216-099-00	METAL CHIP	120K	5%	1/10W
R22	1-216-025-00	METAL CHIP	100	5%	1/10W
R23	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R24	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R31	1-216-033-00	METAL CHIP	220	5%	1/10W
R32	1-216-033-00	METAL CHIP	220	5%	1/10W
R71	1-216-082-00	METAL GLAZE	24K	5%	1/10W
R72	1-216-081-00	METAL CHIP	22K	5%	1/10W
R73	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R74	1-216-089-00	METAL GLAZE	47K	5%	1/10W

< VARIABLE RESISTOR >

RV11A	1-241-761-11	RES, ADJ, CARBON 1K	
RV21A	1-241-761-11	RES, ADJ, CARBON 1K	
RV71A	1-241-630-11	RES, ADJ, CARBON 10K	
RV72A	1-241-630-11	RES, ADJ, CARBON 10K	

****

Ref.No.	Part No.	Description				Remark
*	A-2007-138-A	MD-B BOARD, COMPLETE (RB53A)				
		**********				
		< CAPACITOR >				
C11	1-163-131-00	CERAMIC CHIP	390PF	5%	50V	
C12	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C13	1-136-153-00	FILM	0.01uF	5%	50V	
C14	1-126-177-11	ELECT	100uF	20%	10V	
C15	1-124-234-00	ELECT	22uF	20%	16V	
C16	1-136-273-91	FILM	75PF	5%	630V	
C17	1-164-080-11	CERAMIC	390PF	10%	50V	
C18	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	
C21	1-163-131-00	CERAMIC CHIP	390PF	5%	50V	
C22	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C23	1-136-153-00	FILM	0.01uF	5%	50V	
C24	1-126-177-11	ELECT	100uF	20%	10V	
C25	1-124-234-00	ELECT	22uF	20%	16V	
C26	1-136-273-91	FILM	75PF	5%	630V	
C27	1-164-080-11	CERAMIC	390PF	10%	50V	
C28	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	
C31	1-124-234-00	ELECT	22uF	20%	16V	
C32	1-124-234-00	ELECT	22uF	20%	16V	
C33	1-124-234-00	ELECT	22uF	20%	16V	
C51	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V	
C52	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V	
C53	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V	
C54	1-136-559-11	FILM	0.0047uF	5%	630V	
C56	1-164-505-11	CERAMIC CHIP	2.2uF		16V	
C57	1-164-346-11	CERAMIC CHIP	1uF		16V	
C58	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V	
C72	1-124-499-11	ELECT, NONPOLAR	1uF	20%	50V	
		< CONNECTOR >				
* CNJ31	1-580-782-11	CONNECTOR, BOARD TO BOARD				
* CNJ33	1-580-782-11	CONNECTOR, BOARD TO BOARD				
* CNJ72	1-580-902-11	CONNECTOR, FFC/FPC				
* CNP32	1-580-781-11	PIN, CONNECTOR (PC BOARD) 7P				
* CNP71	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P				
		< IC >				
IC31B	8-759-249-21	IC uPC1330GR				
IC32	8-759-711-85	IC NJM4580E-D				
		< JUMPER RESISTOR >				
JW1	1-216-295-00	METAL CHIP	0	5%	1/10W	
JW2	1-216-295-00	METAL CHIP	0	5%	1/10W	
JW11	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW12	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW13	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW14	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW15	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW16	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW17	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW18	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW19	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW20	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW21	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW22	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW23	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW24	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW25	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW26	1-216-296-91	METAL GLAZE	0	5%	1/8W	
JW27	1-216-296-91	METAL GLAZE	0	5%	1/8W	
		< COIL >				
L11	1-410-780-11	INDUCTOR	27mH			
L21	1-410-780-11	INDUCTOR	27mH			
		< TRANSISTOR >				
Q51	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q52	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q53	8-729-111-29	TRANSISTOR	2SD1616A-K			
Q71B	8-729-216-22	TRANSISTOR	2SA1162-G			
		< RESISTOR >				
R11	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R12	1-216-033-00	METAL CHIP	220	5%	1/10W	
R13	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R14	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R15	1-216-107-00	METAL CHIP	270K	5%	1/10W	
R16	1-249-430-11	CARBON	12K	5%	1/4W	
R21	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R22	1-216-033-00	METAL CHIP	220	5%	1/10W	
R23	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R24	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R25	1-216-107-00	METAL CHIP	270K	5%	1/10W	
R26	1-249-430-11	CARBON	12K	5%	1/4W	
R31	1-216-033-00	METAL CHIP	220	5%	1/10W	
R32	1-216-033-00	METAL CHIP	220	5%	1/10W	
R33	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R41	1-249-393-11	CARBON	10	5%	1/4W	F
R42	1-249-393-11	CARBON	10	5%	1/4W	F
R51	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R52	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R53	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R54	1-216-309-00	METAL CHIP	5.6	5%	1/10W	
R55	1-216-309-00	METAL CHIP	5.6	5%	1/10W	
R56	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R71	1-216-082-00	METAL GLAZE	24K	5%	1/10W	
R72	1-216-081-00	METAL CHIP	22K	5%	1/10W	

MD-B OPEN/UP SW PANEL

Ref.No.	Part No.	Description				Remark
R73	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R74	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
		< VARIABLE RESISTOR >				
RV11B	1-241-761-11	RES, ADJ, CARBON	1K			
RV12B	1-238-551-11	RES, ADJ, CARBON	220K			
RV21	1-241-761-11	RES, ADJ, CARBON	1K			
RV22	1-238-551-11	RES, ADJ, CARBON	220K			
RV71B	1-241-630-11	RES, ADJ, CARBON	10K			
RV72B	1-241-630-11	RES, ADJ, CARBON	10K			
		< TRANSFORMER >				
T51	1-406-419-11	COIL, BIAS OSCILLATION				
**********						
*	1-638-731-11	OPEN/UP SW BOARD				
		**********				
		< CONNECTOR >				
CN705	1-573-383-11	PIN, CONNECTOR (PC BOARD)	2P			
		< SWITCH >				
S702	1-571-300-21	SWITCH, ROTARY (OPEN/UP)				
**********						
*	A-4369-187-A	PANEL BOARD, COMPLETE (AEP)				
		**********				
*	A-4371-226-A	PANEL BOARD, COMPLETE (IT)				
		**********				
*	4-942-301-01	HOLDER, FL TUBE				
*	4-949-935-01	CUSHION (FL)				
		< CAPACITOR >				
C601	1-124-442-00	ELECT	330uF	20%	6.3V	
C602	1-124-442-00	ELECT	330uF	20%	6.3V	
C603	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C604	1-136-169-00	FILM	0.22uF	5%	50V	
C605	1-164-159-11	CERAMIC	0.1uF		50V	
C607	1-102-949-00	CERAMIC	12PF	5%	50V	
C608	1-102-945-00	CERAMIC	8.0PF	+-0.5PF	50V	
C609	1-164-159-11	CERAMIC	0.1uF		50V	
C610	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C611	1-124-261-00	ELECT	10uF	20%	50V	
C612	1-164-159-11	CERAMIC	0.1uF		50V	
C613	1-124-903-11	ELECT	1uF	20%	50V	
C614	1-124-903-11	ELECT	1uF	20%	50V	
C615	1-164-159-11	CERAMIC	0.1uF		50V	
C1101	1-124-589-11	ELECT	47uF	20%	16V	

Ref.No.	Part No.	Description				Remark
C1102	1-162-219-31	CERAMIC	68PF	5%	50V	
C1103	1-162-282-31	CERAMIC	100PF	10%	50V	
C1104	1-126-157-11	ELECT	10uF	20%	16V	
C1106	1-124-252-00	ELECT	0.33uF	20%	50V	
C1107	1-124-463-00	ELECT	0.1uF	20%	50V	
C1108	1-126-301-11	ELECT	1uF	20%	50V	
C1109	1-126-301-11	ELECT	1uF	20%	50V	
C1151	1-124-589-11	ELECT	47uF	20%	16V	
C1152	1-162-219-31	CERAMIC	68PF	5%	50V	
C1153	1-162-282-31	CERAMIC	100PF	10%	50V	
C1154	1-126-157-11	ELECT	10uF	20%	16V	
C1156	1-124-252-00	ELECT	0.33uF	20%	50V	
C1157	1-124-463-00	ELECT	0.1uF	20%	50V	
C1158	1-126-301-11	ELECT	1uF	20%	50V	
C1159	1-126-301-11	ELECT	1uF	20%	50V	
C1501	1-164-159-11	CERAMIC	0.1uF		50V	
C1502	1-164-159-11	CERAMIC	0.1uF		50V	
C1503	1-164-159-11	CERAMIC	0.1uF		50V	
C1504	1-126-301-11	ELECT	1uF	20%	50V	
C1505	1-126-301-11	ELECT	1uF	20%	50V	
C1511	1-164-159-11	CERAMIC	0.1uF		50V	
C1512	1-164-159-11	CERAMIC	0.1uF		50V	
C1513	1-126-157-11	ELECT	10uF	20%	16V	
C1514	1-126-177-11	ELECT	100uF	20%	10V	
C1515	1-164-159-11	CERAMIC	0.1uF		50V	
C1516	1-164-159-11	CERAMIC	0.1uF		50V	
C1517	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C1531	1-126-157-11	ELECT	10uF	20%	16V	
C1532	1-164-159-11	CERAMIC	0.1uF		50V	
C1533	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C1534	1-164-159-11	CERAMIC	0.1uF		50V	
C1535	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C1536	1-164-159-11	CERAMIC	0.1uF		50V	
C1537	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C1538	1-104-905-11	CAP, DOUBLE LAYERS	0.22F		5.5V	
C1541	1-126-177-11	ELECT	100uF	20%	10V	
C1551	1-126-301-11	ELECT	1uF	20%	50V	
C1552	1-126-157-11	ELECT	10uF	20%	16V	
C1553	1-126-157-11	ELECT	10uF	20%	16V	
		< CONNECTOR >				
* CN601	1-568-834-11	SOCKET, CONNECTOR	15P			
		< COMPOSITION CIRCUIT BLOCK >				
CP1501	1-232-998-11	COMPOSITION CIRCUIT BLOCK	100K			
CP1502	1-232-998-11	COMPOSITION CIRCUIT BLOCK	100K			
CP1503	1-232-998-11	COMPOSITION CIRCUIT BLOCK	100K			
CP1504	1-232-998-11	COMPOSITION CIRCUIT BLOCK	100K			

PANEL

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D601	8-719-200-82	DIODE 11ES2	
D602	8-719-987-63	DIODE 1N4148M	
D603	8-719-987-63	DIODE 1N4148M	
D604	8-719-987-63	DIODE 1N4148M	
D1511	8-719-987-63	DIODE 1N4148M	
D1512	8-719-987-63	DIODE 1N4148M	
D1513	8-719-987-63	DIODE 1N4148M	
D1514	8-719-987-63	DIODE 1N4148M	
D1522	8-719-987-63	DIODE 1N4148M	
D1523	8-719-987-63	DIODE 1N4148M	
D1531	8-719-200-82	DIODE 11ES2	
D1532	8-719-200-82	DIODE 11ES2	
D1533	8-719-987-63	DIODE 1N4148M	
D1534	8-719-987-63	DIODE 1N4148M	
D1535	8-719-987-63	DIODE 1N4148M	
D1541	8-719-987-63	DIODE 1N4148M	
D1551	8-719-200-82	DIODE 11ES2	
D1552	8-719-200-82	DIODE 11ES2	
D1553	8-719-987-63	DIODE 1N4148M	
D1554	8-719-046-46	DIODE SEL5221S-TH8C (VIDEO)	
D1555	8-719-046-46	DIODE SEL5221S-TH8C (TAPE)	
D1556	8-719-046-46	DIODE SEL5221S-TH8C (CD)	
D1557	8-719-046-46	DIODE SEL5221S-TH8C (TUNER)	
D1558	8-719-046-46	DIODE SEL5221S-TH8C (PHONO)	
D1559	8-719-046-46	DIODE SEL5221S-TH8C (HALL 1)	
D1560	8-719-046-46	DIODE SEL5221S-TH8C (DANCE 2)	
D1561	8-719-046-46	DIODE SEL5221S-TH8C (VOCAL 3)	
D1562	8-719-046-46	DIODE SEL5221S-TH8C (POPS 4)	
D1563	8-719-046-46	DIODE SEL5221S-TH8C (BGM 5)	
D1564	8-719-046-46	DIODE SEL5221S-TH8C (EQUALIZER)	
D1565	8-719-046-46	DIODE SEL5221S-TH8C (MEMORY)	
D1566	8-719-046-46	DIODE SEL5221S-TH8C (VOLUME)	
D1567	8-719-046-46	DIODE SEL5221S-TH8C (P.FILE)	
D1581	8-719-987-63	DIODE 1N4148M	
D1582	8-719-987-63	DIODE 1N4148M	
D1583	8-719-987-63	DIODE 1N4148M	
D1584	8-719-987-63	DIODE 1N4148M	
D1585	8-719-987-63	DIODE 1N4148M	
D1586	8-719-987-63	DIODE 1N4148M	
D1587	8-719-987-63	DIODE 1N4148M	
D1589	8-719-987-63	DIODE 1N4148M	
		< FLUORESCENT INDICATOR >	
FL601	1-517-265-11	INDICATOR TUBE, FLUORESCENT	
FL1501	1-517-266-21	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC601	8-759-519-16	IC uPD78043GF-079-3B9	
IC602	8-749-920-83	IC GP1U52XB	
IC1101	8-759-634-51	IC M5218AP	
IC1501	8-759-253-53	IC uPD78042GF056-3B9	
IC1502	8-759-991-11	IC XR1091DCP	
IC1503	8-759-635-63	IC M51943BSL	
IC1505	8-759-917-18	IC SN74HCU04AN	
IC1506	8-759-916-46	IC SN74HC139AN	
IC1507	8-759-917-18	IC SN74HCU04AN	
		< COIL >	
L601	1-410-521-11	INDUCTOR 100uH	
L1511	1-410-513-11	INDUCTOR 22uH	
L1512	1-410-513-11	INDUCTOR 22uH	
L1531	1-410-521-11	INDUCTOR 100uH	
		< TRANSISTOR >	
Q601	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q602	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1102	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1103	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1152	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1153	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1521	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1531	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1545	8-729-900-36	TRANSISTOR DTC124ES	
Q1546	8-729-900-63	TRANSISTOR DTA124ES	
Q1551	8-729-119-76	TRANSISTOR 2SA1175-HFE	
		< RESISTOR >	
R602	1-249-417-11	CARBON 1K 5% 1/4W F	
R603	1-249-417-11	CARBON 1K 5% 1/4W F	
R604	1-249-417-11	CARBON 1K 5% 1/4W F	
R605	1-249-417-11	CARBON 1K 5% 1/4W F	
R606	1-249-429-11	CARBON 10K 5% 1/4W	
R607	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R608	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R609	1-249-429-11	CARBON 10K 5% 1/4W	
R610	1-249-417-11	CARBON 1K 5% 1/4W F	
R611	1-249-417-11	CARBON 1K 5% 1/4W F	
R612	1-249-417-11	CARBON 1K 5% 1/4W F	
R613	1-249-417-11	CARBON 1K 5% 1/4W F	
R614	1-247-807-31	CARBON 100 5% 1/4W F	
R615	1-249-413-11	CARBON 470 5% 1/4W F	
R619	1-249-437-11	CARBON 47K 5% 1/4W	
R620	1-249-433-11	CARBON 22K 5% 1/4W	
R621	1-249-433-11	CARBON 22K 5% 1/4W	
R622	1-249-417-11	CARBON 1K 5% 1/4W F	
R623	1-249-409-11	CARBON 220 5% 1/4W F	
R624	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R625	1-249-441-11	CARBON 100K 5% 1/4W (AEP)	

PANEL

Ref.No.	Part No.	Description				Remark
R626	1-249-441-11	CARBON	100K	5%	1/4W	(IT)
R627	1-249-441-11	CARBON	100K	5%	1/4W	
R628	1-249-441-11	CARBON	100K	5%	1/4W	
R629	1-249-441-11	CARBON	100K	5%	1/4W	
R631	1-249-441-11	CARBON	100K	5%	1/4W	
R632	1-249-441-11	CARBON	100K	5%	1/4W	
R633	1-249-441-11	CARBON	100K	5%	1/4W	
R634	1-249-441-11	CARBON	100K	5%	1/4W	
R635	1-249-441-11	CARBON	100K	5%	1/4W	
R636	1-249-441-11	CARBON	100K	5%	1/4W	
R637	1-249-441-11	CARBON	100K	5%	1/4W	
R638	1-249-441-11	CARBON	100K	5%	1/4W	
R640	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R641	1-247-807-31	CARBON	100	5%	1/4W	
R642	1-249-406-11	CARBON	120	5%	1/4W	F
R643	1-249-406-11	CARBON	120	5%	1/4W	F
R644	1-247-811-31	CARBON	150	5%	1/4W	
R645	1-249-408-11	CARBON	180	5%	1/4W	F
R646	1-249-409-11	CARBON	220	5%	1/4W	F
R647	1-249-410-11	CARBON	270	5%	1/4W	F
R649	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R650	1-247-807-31	CARBON	100	5%	1/4W	
R651	1-249-406-11	CARBON	120	5%	1/4W	F
R652	1-249-406-11	CARBON	120	5%	1/4W	F
R653	1-247-811-31	CARBON	150	5%	1/4W	
R654	1-249-408-11	CARBON	180	5%	1/4W	F
R655	1-249-409-11	CARBON	220	5%	1/4W	F
R656	1-249-410-11	CARBON	270	5%	1/4W	F
R657	1-249-411-11	CARBON	330	5%	1/4W	
R658	1-249-413-11	CARBON	470	5%	1/4W	F
R659	1-249-414-11	CARBON	560	5%	1/4W	F
R660	1-249-416-11	CARBON	820	5%	1/4W	F
R661	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R662	1-247-807-31	CARBON	100	5%	1/4W	
R663	1-249-406-11	CARBON	120	5%	1/4W	F
R664	1-249-406-11	CARBON	120	5%	1/4W	F
R665	1-247-811-31	CARBON	150	5%	1/4W	
R666	1-249-408-11	CARBON	180	5%	1/4W	F
R667	1-249-409-11	CARBON	220	5%	1/4W	F
R668	1-249-410-11	CARBON	270	5%	1/4W	F
R669	1-249-411-11	CARBON	330	5%	1/4W	
R670	1-249-413-11	CARBON	470	5%	1/4W	F
R671	1-249-414-11	CARBON	560	5%	1/4W	F
R672	1-249-416-11	CARBON	820	5%	1/4W	F
R673	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R674	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R675	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R676	1-249-441-11	CARBON	100K	5%	1/4W	(IT)
R677	1-249-441-11	CARBON	100K	5%	1/4W	(AEP)
R678	1-249-417-11	CARBON	1K	5%	1/4W	F

Ref.No.	Part No.	Description				Remark
R679	1-249-417-11	CARBON	1K	5%	1/4W	F
R680	1-249-417-11	CARBON	1K	5%	1/4W	F
R681	1-249-417-11	CARBON	1K	5%	1/4W	F
R682	1-249-429-11	CARBON	10K	5%	1/4W	
R683	1-249-417-11	CARBON	1K	5%	1/4W	F
R1101	1-249-417-11	CARBON	1K	5%	1/4W	F
R1102	1-247-903-00	CARBON	1M	5%	1/4W	
R1103	1-249-429-11	CARBON	10K	5%	1/4W	
R1104	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1106	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1107	1-249-434-11	CARBON	27K	5%	1/4W	
R1108	1-247-881-00	CARBON	120K	5%	1/4W	
R1109	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R1110	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1111	1-249-435-11	CARBON	33K	5%	1/4W	
R1112	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1113	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1114	1-249-412-11	CARBON	390	5%	1/4W	F
R1151	1-249-417-11	CARBON	1K	5%	1/4W	F
R1152	1-247-903-00	CARBON	1M	5%	1/4W	
R1153	1-249-429-11	CARBON	10K	5%	1/4W	
R1154	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1156	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1157	1-249-434-11	CARBON	27K	5%	1/4W	
R1158	1-247-881-00	CARBON	120K	5%	1/4W	
R1159	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R1160	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1161	1-249-435-11	CARBON	33K	5%	1/4W	
R1162	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1163	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1164	1-249-412-11	CARBON	390	5%	1/4W	F
R1181	1-249-431-11	CARBON	15K	5%	1/4W	
R1501	1-249-384-11	CARBON	1.8	5%	1/6W	F
R1502	1-249-384-11	CARBON	1.8	5%	1/6W	F
R1511	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R1512	1-249-393-11	CARBON	10	5%	1/4W	F
R1521	1-249-429-11	CARBON	10K	5%	1/4W	
R1522	1-249-429-11	CARBON	10K	5%	1/4W	
R1523	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1531	1-249-417-11	CARBON	1K	5%	1/4W	F
R1532	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R1533	1-249-429-11	CARBON	10K	5%	1/4W	
R1545	1-249-433-11	CARBON	22K	5%	1/4W	
R1546	1-249-433-11	CARBON	22K	5%	1/4W	
R1551	1-249-429-11	CARBON	10K	5%	1/4W	
R1552	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1554	1-249-415-11	CARBON	680	5%	1/4W	F
R1555	1-249-414-11	CARBON	560	5%	1/4W	F
R1556	1-249-415-11	CARBON	680	5%	1/4W	F
R1557	1-249-415-11	CARBON	680	5%	1/4W	F

Ref. No.	Part No.	Description				Remark
R1558	1-249-415-11	CARBON	680	5%	1/4W	F
R1559	1-249-415-11	CARBON	680	5%	1/4W	F
R1563	1-249-429-11	CARBON	10K	5%	1/4W	
R1564	1-249-429-11	CARBON	10K	5%	1/4W	
R1565	1-249-429-11	CARBON	10K	5%	1/4W	
R1571	1-249-429-11	CARBON	10K	5%	1/4W	
R1572	1-249-429-11	CARBON	10K	5%	1/4W	
R1573	1-249-429-11	CARBON	10K	5%	1/4W	
R1581	1-247-883-00	CARBON	150K	5%	1/4W	
R1582	1-249-429-11	CARBON	10K	5%	1/4W	
R1583	1-247-895-00	CARBON	470K	5%	1/4W	
R1591	1-247-807-31	CARBON	100	5%	1/4W	
R1592	1-247-807-31	CARBON	100	5%	1/4W	
R1593	1-247-807-31	CARBON	100	5%	1/4W	
R1594	1-247-807-31	CARBON	100	5%	1/4W	
R1595	1-249-413-11	CARBON	470	5%	1/4W	F
R1596	1-249-413-11	CARBON	470	5%	1/4W	F
R1597	1-249-413-11	CARBON	470	5%	1/4W	F
R1598	1-249-393-11	CARBON	10	5%	1/4W	F

< VARIABLE RESISTOR >

RV1181	1-223-251-11	RES, VAR, CARBON 100K/100K (SURROUND)
RV1182	1-223-251-11	RES, VAR, CARBON 100K/100K (DBS LEVEL)
RV1183	1-223-251-11	RES, VAR, CARBON 100K/100K (DBS FREQUENCY (Hz))
RV1184	1-223-569-11	RES, VAR, CARBON 100K (BALANCE)

< SWITCH >

S601	1-554-303-21	SWITCH, TACTILE (POWER)
S602	1-554-303-21	SWITCH, TACTILE (SLEEP)
S603	1-554-303-21	SWITCH, TACTILE (1)
S604	1-554-303-21	SWITCH, TACTILE (2)
S605	1-554-303-21	SWITCH, TACTILE (3)
S606	1-554-303-21	SWITCH, TACTILE (4)
S607	1-554-303-21	SWITCH, TACTILE (5)
S608	1-554-303-21	SWITCH, TACTILE (6)
S610	1-554-303-21	SWITCH, TACTILE (7)
S611	1-554-303-21	SWITCH, TACTILE (8)
S616	1-554-303-21	SWITCH, TACTILE (BAND)
S617	1-554-303-21	SWITCH, TACTILE (SHIFT)
S618	1-554-303-21	SWITCH, TACTILE (CHARACTER)
S619	1-554-303-21	SWITCH, TACTILE (MEMORY)
S620	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)
S621	1-554-303-21	SWITCH, TACTILE (-)
S622	1-554-303-21	SWITCH, TACTILE (9)
S623	1-554-303-21	SWITCH, TACTILE (0)
S624	1-554-303-21	SWITCH, TACTILE (NEXT)
S627	1-554-303-21	SWITCH, TACTILE (PTY)
S628	1-554-303-21	SWITCH, TACTILE (EON)
S629	1-554-303-21	SWITCH, TACTILE (DISPLAY)
S630	1-554-303-21	SWITCH, TACTILE (REC)
S631	1-554-303-21	SWITCH, TACTILE (DAILY)
S632	1-554-303-21	SWITCH, TACTILE (ONCE)
S633	1-554-303-21	SWITCH, TACTILE (TIMER)
S634	1-554-303-21	SWITCH, TACTILE (CLOCK)
S636	1-554-303-21	SWITCH, TACTILE (+)
S1551	1-554-303-21	SWITCH, TACTILE (PHONO)
S1552	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL, DOWN)
S1553	1-554-303-21	SWITCH, TACTILE (TUNER)
S1554	1-554-303-21	SWITCH, TACTILE (CD)
S1555	1-554-303-21	SWITCH, TACTILE (TAPE)
S1556	1-554-303-21	SWITCH, TACTILE (VIDEO)
S1557	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL, RIGHT)
S1558	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL, LEFT)
S1559	1-554-303-21	SWITCH, TACTILE (P. FILE)
S1560	1-554-303-21	SWITCH, TACTILE (HALL 1)
S1561	1-554-303-21	SWITCH, TACTILE (DANCE 2)
S1562	1-554-303-21	SWITCH, TACTILE (EQ FLAT)
S1563	1-554-303-21	SWITCH, TACTILE (EQUALIZER)
S1565	1-554-303-21	SWITCH, TACTILE (DISPLAY)
S1566	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL, UP)
S1567	1-554-303-21	SWITCH, TACTILE (MEMORY)
S1568	1-554-303-21	SWITCH, TACTILE (VOCAL 3)
S1569	1-554-303-21	SWITCH, TACTILE (POPS 4)
S1570	1-554-303-21	SWITCH, TACTILE (BGM 5)

< VIBRATOR >

X601	1-760-096-21	VIBRATOR, CRYSTAL (4.19MHz)
X1501	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)

****

*	A-4369-200-A	PANEL BOARD, COMPLETE (E, AUS, MX, PX)

****

	4-942-301-01	HOLDER, FL TUBE
*	4-949-935-01	CUSHION (FL)

< CAPACITOR >

C601	1-124-442-00	ELECT	330uF	20%	6.3V
C602	1-161-379-00	CERAMIC	0.01uF	20%	25V
C603	1-124-442-00	ELECT	330uF	20%	6.3V
C605	1-124-916-11	ELECT	22uF	20%	63V
C606	1-102-950-00	CERAMIC	13PF	5%	50V
C607	1-102-950-00	CERAMIC	13PF	5%	50V
C608	1-126-163-11	ELECT	4.7uF	20%	50V
C609	1-161-379-00	CERAMIC	0.01uF	20%	25V
C610	1-161-379-00	CERAMIC	0.01uF	20%	25V
C613	1-124-903-11	ELECT	1uF	20%	50V
C614	1-124-903-11	ELECT	1uF	20%	50V
C615	1-124-442-00	ELECT	330uF	20%	6.3V
C1101	1-124-589-11	ELECT	47uF	20%	16V

PANEL

Ref. No.	Part No.	Description			Remark
C1102	1-162-219-31	CERAMIC	68PF	5%	50V
C1103	1-162-282-31	CERAMIC	100PF	10%	50V
C1104	1-126-157-11	ELECT	10uF	20%	16V
C1106	1-124-252-00	ELECT	0.33uF	20%	50V
C1107	1-124-463-00	ELECT	0.1uF	20%	50V
C1108	1-126-301-11	ELECT	1uF	20%	50V
C1109	1-126-301-11	ELECT	1uF	20%	50V
C1151	1-124-589-11	ELECT	47uF	20%	16V
C1152	1-162-219-31	CERAMIC	68PF	5%	50V
C1153	1-162-282-31	CERAMIC	100PF	10%	50V
C1154	1-126-157-11	ELECT	10uF	20%	16V
C1156	1-124-252-00	ELECT	0.33uF	20%	50V
C1157	1-124-463-00	ELECT	0.1uF	20%	50V
C1158	1-126-301-11	ELECT	1uF	20%	50V
C1159	1-126-301-11	ELECT	1uF	20%	50V
C1501	1-164-159-11	CERAMIC	0.1uF		50V
C1502	1-164-159-11	CERAMIC	0.1uF		50V
C1503	1-164-159-11	CERAMIC	0.1uF		50V
C1504	1-126-301-11	ELECT	1uF	20%	50V
C1505	1-126-301-11	ELECT	1uF	20%	50V
C1511	1-164-159-11	CERAMIC	0.1uF		50V
C1512	1-164-159-11	CERAMIC	0.1uF		50V
C1513	1-126-157-11	ELECT	10uF	20%	16V
C1514	1-126-177-11	ELECT	100uF	20%	10V
C1515	1-164-159-11	CERAMIC	0.1uF		50V
C1516	1-164-159-11	CERAMIC	0.1uF		50V
C1517	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1531	1-126-157-11	ELECT	10uF	20%	16V
C1532	1-164-159-11	CERAMIC	0.1uF		50V
C1533	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1534	1-164-159-11	CERAMIC	0.1uF		50V
C1535	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1536	1-164-159-11	CERAMIC	0.1uF		50V
C1537	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1538	1-104-905-11	CAP, DOUBLE LAYERS	0.22F		5.5V
C1541	1-126-177-11	ELECT	100uF	20%	10V
C1551	1-126-301-11	ELECT	1uF	20%	50V
C1552	1-126-157-11	ELECT	10uF	20%	16V
C1553	1-126-157-11	ELECT	10uF	20%	16V
		< CONNECTOR >			
* CN601	1-568-830-11	SOCKET, CONNECTOR 11P			
		< COMPOSITION CIRCUIT BLOCK >			
CP1501	1-232-998-11	COMPOSITION CIRCUIT BLOCK	100K		
CP1502	1-232-998-11	COMPOSITION CIRCUIT BLOCK	100K		
CP1503	1-232-998-11	COMPOSITION CIRCUIT BLOCK	100K		
CP1504	1-232-998-11	COMPOSITION CIRCUIT BLOCK	100K		

Ref. No.	Part No.	Description		Remark
		< DIODE >		
D600	8-719-987-63	DIODE	1N4148M	
D601	8-719-987-63	DIODE	1N4148M	
D602	8-719-200-82	DIODE	11ES2	
D604	8-719-987-63	DIODE	1N4148M	
D605	8-719-987-63	DIODE	1N4148M	
D606	8-719-987-63	DIODE	1N4148M	
D607	8-719-987-63	DIODE	1N4148M	
D609	8-719-987-63	DIODE	1N4148M	
D614	8-719-987-63	DIODE	1N4148M	
D615	8-719-987-63	DIODE	1N4148M	
D616	8-719-987-63	DIODE	1N4148M	
D617	8-719-987-63	DIODE	1N4148M	
D618	8-719-987-63	DIODE	1N4148M	
D619	8-719-987-63	DIODE	1N4148M	
D620	8-719-987-63	DIODE	1N4148M	
D1511	8-719-987-63	DIODE	1N4148M	
D1512	8-719-987-63	DIODE	1N4148M	
D1513	8-719-987-63	DIODE	1N4148M	
D1514	8-719-987-63	DIODE	1N4148M	
D1522	8-719-987-63	DIODE	1N4148M	
D1523	8-719-987-63	DIODE	1N4148M	
D1531	8-719-200-82	DIODE	11ES2	
D1532	8-719-200-82	DIODE	11ES2	
D1533	8-719-987-63	DIODE	1N4148M	
D1534	8-719-987-63	DIODE	1N4148M	
D1535	8-719-987-63	DIODE	1N4148M	
D1541	8-719-987-63	DIODE	1N4148M	
D1551	8-719-200-82	DIODE	11ES2	
D1552	8-719-200-82	DIODE	11ES2	
D1553	8-719-987-63	DIODE	1N4148M	
D1554	8-719-046-46	DIODE	SEL5221S-TH8C	(VIDEO)
D1555	8-719-046-46	DIODE	SEL5221S-TH8C	(TAPE)
D1556	8-719-046-46	DIODE	SEL5221S-TH8C	(CD)
D1557	8-719-046-46	DIODE	SEL5221S-TH8C	(TUNER)
D1558	8-719-046-46	DIODE	SEL5221S-TH8C	(PHONO)
D1559	8-719-046-46	DIODE	SEL5221S-TH8C	(HALL 1)
D1560	8-719-046-46	DIODE	SEL5221S-TH8C	(DANCE 2)
D1561	8-719-046-46	DIODE	SEL5221S-TH8C	(VOCAL 3)
D1562	8-719-046-46	DIODE	SEL5221S-TH8C	(POPS 4)
D1563	8-719-046-46	DIODE	SEL5221S-TH8C	(BGM 5)
D1564	8-719-046-46	DIODE	SEL5221S-TH8C	(EQUALIZER)
D1565	8-719-046-46	DIODE	SEL5221S-TH8C	(MEMORY)
D1566	8-719-046-46	DIODE	SEL5221S-TH8C	(VOLUME)
D1567	8-719-046-46	DIODE	SEL5221S-TH8C	(P.FILE)
D1581	8-719-987-63	DIODE	1N4148M	
D1582	8-719-987-63	DIODE	1N4148M	
D1583	8-719-987-63	DIODE	1N4148M	
D1584	8-719-987-63	DIODE	1N4148M	
D1585	8-719-987-63	DIODE	1N4148M	

Ref. No.	Part No.	Description	Remark
D1586	8-719-987-63	DIODE 1N4148M	
D1587	8-719-987-63	DIODE 1N4148M	
D1589	8-719-987-63	DIODE 1N4148M	
		< FLUORESCENT INDICATOR >	
FL601	1-517-265-11	INDICATOR TUBE, FLUORESCENT	
FL1501	1-517-266-21	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC601	8-759-248-05	IC TMP47C1270AN-H227	
IC602	8-749-920-83	IC GP1U52XB	
IC1101	8-759-634-51	IC M5218AP	
IC1501	8-759-253-53	IC uPD78042GF056-3B9	
IC1502	8-759-991-11	IC XR1091DCP	
IC1503	8-759-635-63	IC M51943BSL	
IC1505	8-759-917-18	IC SN74HCU04AN	
IC1506	8-759-916-46	IC SN74HC139AN	
IC1507	8-759-917-18	IC SN74HCU04AN	
		< COIL >	
L601	1-410-521-11	INDUCTOR 100uH	
L1511	1-410-513-11	INDUCTOR 22uH	
L1512	1-410-513-11	INDUCTOR 22uH	
L1531	1-410-521-11	INDUCTOR 100uH	
		< TRANSISTOR >	
Q602	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1102	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1103	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1152	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1153	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1521	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1531	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q1545	8-729-900-36	TRANSISTOR DTC124ES	
Q1546	8-729-900-63	TRANSISTOR DTA124ES	
Q1551	8-729-119-76	TRANSISTOR 2SA1175-HFE	
		< RESISTOR >	
R603	1-249-429-11	CARBON 10K 5% 1/4W	
R604	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R605	1-249-441-11	CARBON 100K 5% 1/4W	
R606	1-249-417-11	CARBON 1K 5% 1/4W	F
R607	1-249-409-11	CARBON 220 5% 1/4W	F
R608	1-249-409-11	CARBON 220 5% 1/4W	F
R609	1-249-409-11	CARBON 220 5% 1/4W	F
R611	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R612	1-249-423-11	CARBON 3.3K 5% 1/4W	F
R613	1-249-441-11	CARBON 100K 5% 1/4W	
R614	1-249-441-11	CARBON 100K 5% 1/4W	
R615	1-249-441-11	CARBON 100K 5% 1/4W	
R619	1-249-429-11	CARBON 10K 5% 1/4W	
R620	1-249-429-11	CARBON 10K 5% 1/4W	
R621	1-249-429-11	CARBON 10K 5% 1/4W	
R622	1-249-429-11	CARBON 10K 5% 1/4W	
R623	1-249-429-11	CARBON 10K 5% 1/4W	
R624	1-249-429-11	CARBON 10K 5% 1/4W	
R625	1-249-429-11	CARBON 10K 5% 1/4W	
R626	1-249-429-11	CARBON 10K 5% 1/4W	
R627	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R628	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R629	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R630	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R631	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R632	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R633	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R634	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R635	1-249-429-11	CARBON 10K 5% 1/4W	
R1101	1-249-417-11	CARBON 1K 5% 1/4W	F
R1102	1-247-903-00	CARBON 1M 5% 1/4W	
R1103	1-249-429-11	CARBON 10K 5% 1/4W	
R1104	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R1106	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R1107	1-249-434-11	CARBON 27K 5% 1/4W	
R1108	1-247-881-00	CARBON 120K 5% 1/4W	
R1109	1-249-427-11	CARBON 6.8K 5% 1/4W	F
R1110	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R1111	1-249-435-11	CARBON 33K 5% 1/4W	
R1112	1-249-426-11	CARBON 5.6K 5% 1/4W	
R1113	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R1114	1-249-412-11	CARBON 390 5% 1/4W	F
R1151	1-249-417-11	CARBON 1K 5% 1/4W	F
R1152	1-247-903-00	CARBON 1M 5% 1/4W	
R1153	1-249-429-11	CARBON 10K 5% 1/4W	
R1154	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R1156	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R1157	1-249-434-11	CARBON 27K 5% 1/4W	
R1158	1-247-881-00	CARBON 120K 5% 1/4W	
R1159	1-249-427-11	CARBON 6.8K 5% 1/4W	F
R1160	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R1161	1-249-435-11	CARBON 33K 5% 1/4W	
R1162	1-249-426-11	CARBON 5.6K 5% 1/4W	
R1163	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R1164	1-249-412-11	CARBON 390 5% 1/4W	F
R1181	1-249-431-11	CARBON 15K 5% 1/4W	
R1501	1-249-384-11	CARBON 1.8 5% 1/6W	F
R1502	1-249-384-11	CARBON 1.8 5% 1/6W	F
R1511	1-249-419-11	CARBON 1.5K 5% 1/4W	F
R1512	1-249-393-11	CARBON 10 5% 1/4W	F
R1521	1-249-429-11	CARBON 10K 5% 1/4W	
R1522	1-249-429-11	CARBON 10K 5% 1/4W	
R1523	1-249-425-11	CARBON 4.7K 5% 1/4W	F

PANEL PANEL (A)

Ref.No.	Part No.	Description				Remark
R1531	1-249-417-11	CARBON	1K	5%	1/4W	F
R1532	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R1533	1-249-429-11	CARBON	10K	5%	1/4W	
R1545	1-249-433-11	CARBON	22K	5%	1/4W	
R1546	1-249-433-11	CARBON	22K	5%	1/4W	
R1551	1-249-429-11	CARBON	10K	5%	1/4W	
R1552	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1554	1-249-415-11	CARBON	680	5%	1/4W	F
R1555	1-249-414-11	CARBON	560	5%	1/4W	F
R1556	1-249-415-11	CARBON	680	5%	1/4W	F
R1557	1-249-415-11	CARBON	680	5%	1/4W	F
R1558	1-249-415-11	CARBON	680	5%	1/4W	F
R1559	1-249-415-11	CARBON	680	5%	1/4W	F
R1563	1-249-429-11	CARBON	10K	5%	1/4W	
R1564	1-249-429-11	CARBON	10K	5%	1/4W	
R1565	1-249-429-11	CARBON	10K	5%	1/4W	
R1571	1-249-429-11	CARBON	10K	5%	1/4W	
R1572	1-249-429-11	CARBON	10K	5%	1/4W	
R1573	1-249-429-11	CARBON	10K	5%	1/4W	
R1581	1-247-883-00	CARBON	150K	5%	1/4W	
R1582	1-249-429-11	CARBON	10K	5%	1/4W	
R1583	1-247-903-00	CARBON	1M	5%	1/4W	
R1591	1-247-807-31	CARBON	100	5%	1/4W	
R1592	1-247-807-31	CARBON	100	5%	1/4W	
R1593	1-247-807-31	CARBON	100	5%	1/4W	
R1594	1-247-807-31	CARBON	100	5%	1/4W	
R1595	1-249-413-11	CARBON	470	5%	1/4W	F
R1596	1-249-413-11	CARBON	470	5%	1/4W	F
R1597	1-249-413-11	CARBON	470	5%	1/4W	F
R1598	1-249-393-11	CARBON	10	5%	1/4W	F

< VARIABLE RESISTOR >

RV1181	1-223-251-11	RES, VAR, CARBON 100K/100K (SURROUND)
RV1182	1-223-251-11	RES, VAR, CARBON 100K/100K (DBS LEVEL)
RV1183	1-223-251-11	RES, VAR, CARBON 100K/100K (DBS FREQUENCY (Hz))
RV1184	1-223-569-11	RES, VAR, CARBON 100K (BALANCE)

< SWITCH >

S601	1-554-303-21	SWITCH, TACTILE (1)
S602	1-554-303-21	SWITCH, TACTILE (2)
S603	1-554-303-21	SWITCH, TACTILE (3)
S604	1-554-303-21	SWITCH, TACTILE (4)
S605	1-554-303-21	SWITCH, TACTILE (5)
S606	1-554-303-21	SWITCH, TACTILE (6)
S607	1-554-303-21	SWITCH, TACTILE (7)
S608	1-554-303-21	SWITCH, TACTILE (8)
S609	1-554-303-21	SWITCH, TACTILE (9)
S610	1-554-303-21	SWITCH, TACTILE (0)
S611	1-554-303-21	SWITCH, TACTILE (+)
S612	1-554-303-21	SWITCH, TACTILE (-)
S613	1-554-303-21	SWITCH, TACTILE (SHIFT)
S614	1-554-303-21	SWITCH, TACTILE (BAND)
S615	1-554-303-21	SWITCH, TACTILE (MEMORY)
S616	1-554-303-21	SWITCH, TACTILE (ONCE)
S617	1-554-303-21	SWITCH, TACTILE (DAILY)
S618	1-554-303-21	SWITCH, TACTILE (REC)
S619	1-554-303-21	SWITCH, TACTILE (CLOCK)
S620	1-554-303-21	SWITCH, TACTILE (SLEEP)
S621	1-554-303-21	SWITCH, TACTILE (TIMER)
S622	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)
S623	1-554-303-21	SWITCH, TACTILE (CHARACTER)
S624	1-554-303-21	SWITCH, TACTILE (POWER)
S625	1-554-303-21	SWITCH, TACTILE (DISPLAY)
S626	1-554-303-21	SWITCH, TACTILE (NEXT)
S1551	1-554-303-21	SWITCH, TACTILE (PHONO)
S1552	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL, DOWN)
S1553	1-554-303-21	SWITCH, TACTILE (TUNER)
S1554	1-554-303-21	SWITCH, TACTILE (CD)
S1555	1-554-303-21	SWITCH, TACTILE (TAPE)
S1556	1-554-303-21	SWITCH, TACTILE (VIDEO)
S1557	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL, RIGHT)
S1558	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL, LEFT)
S1559	1-554-303-21	SWITCH, TACTILE (P.FILE)
S1560	1-554-303-21	SWITCH, TACTILE (HALL 1)
S1561	1-554-303-21	SWITCH, TACTILE (DANCE 2)
S1562	1-554-303-21	SWITCH, TACTILE (EQ FLAT)
S1563	1-554-303-21	SWITCH, TACTILE (EQUALIZER)
S1565	1-554-303-21	SWITCH, TACTILE (DISPLAY)
S1566	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL, UP)
S1567	1-554-303-21	SWITCH, TACTILE (MEMORY)
S1568	1-554-303-21	SWITCH, TACTILE (VOCAL 3)
S1569	1-554-303-21	SWITCH, TACTILE (POPS 4)
S1570	1-554-303-21	SWITCH, TACTILE (BGM 5)

< VIBRATOR >

X601	1-579-564-11	VIBRATOR, CRYSTAL (8.38MHz)
X1501	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)

****

*	1-650-780-21	PANEL (A) BOARD

****

< CONNECTOR >

* CN951	1-568-828-11	SOCKET, CONNECTOR 9P

< DIODE >

D982	8-719-046-42	DIODE SEL5421E-TH8C (▷)
D983	8-719-046-42	DIODE SEL5421E-TH8C (◁)

Ref. No.	Part No.	Description				Remark
		< RESISTOR >				
R981	1-247-811-31	CARBON	150	5%	1/4W	
R982	1-249-409-11	CARBON	220	5%	1/4W	F
R983	1-249-415-11	CARBON	680	5%	1/4W	F
R984	1-249-417-11	CARBON	1K	5%	1/4W	F
R985	1-249-426-11	CARBON	5.6K	5%	1/4W	
R986	1-249-430-11	CARBON	12K	5%	1/4W	
		< SWITCH >				
S901	1-554-303-21	SWITCH, TACTILE (■)				
S902	1-554-303-21	SWITCH, TACTILE (▷)				
S903	1-554-303-21	SWITCH, TACTILE (◁)				
S904	1-554-303-21	SWITCH, TACTILE (AMS ◀◀)				
S905	1-554-303-21	SWITCH, TACTILE (AMS ▶▶)				
S906	1-572-269-11	SWITCH, SLIDE (DOLBY NR)				
S907	1-572-268-11	SWITCH, SLIDE (DIRECTION MODE)				
**********						
*	1-650-781-21	PANEL (B) BOARD				
		**********				
		< CONNECTOR >				
* CN952	1-568-856-11	SOCKET, CONNECTOR 13P				
		< DIODE >				
D991	8-719-046-46	DIODE SEL5221S-TH8C (REC ●)				
D992	8-719-046-38	DIODE SEL5821A-TH8C (PAUSE ▮▮)				
D994	8-719-046-42	DIODE SEL5421E-TH8C (▷)				
D995	8-719-046-42	DIODE SEL5421E-TH8C (◁)				
D996	8-719-046-46	DIODE SEL5221S-TH8C (CD SYNCHRO)				
D997	8-719-046-46	DIODE SEL5221S-TH8C (NORMAL)				
D998	8-719-046-46	DIODE SEL5221S-TH8C (HIGH)				
		< RESISTOR >				
R990	1-247-811-31	CARBON	150	5%	1/4W	
R991	1-249-409-11	CARBON	220	5%	1/4W	F
R992	1-249-411-11	CARBON	330	5%	1/4W	
R993	1-249-413-11	CARBON	470	5%	1/4W	F
R994	1-249-411-11	CARBON	330	5%	1/4W	
R995	1-249-413-11	CARBON	470	5%	1/4W	F
R996	1-249-415-11	CARBON	680	5%	1/4W	F
R997	1-249-417-11	CARBON	1K	5%	1/4W	F
R998	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R999	1-249-424-11	CARBON	3.9K	5%	1/4W	F
		< SWITCH >				
S951	1-554-303-21	SWITCH, TACTILE (■)				
S952	1-554-303-21	SWITCH, TACTILE (PAUSE ▮▮)				
S953	1-554-303-21	SWITCH, TACTILE (▷)				
S954	1-554-303-21	SWITCH, TACTILE (◁)				
S955	1-554-303-21	SWITCH, TACTILE (REC MUTE ●)				
S956	1-554-303-21	SWITCH, TACTILE (AMS ◀◀)				
S957	1-554-303-21	SWITCH, TACTILE (AMS ▶▶)				
S958	1-554-303-21	SWITCH, TACTILE (REC ●)				
S959	1-554-303-21	SWITCH, TACTILE (HIGH)				
S960	1-554-303-21	SWITCH, TACTILE (NORMAL)				
S961	1-554-303-21	SWITCH, TACTILE (CD SYNCHRO)				
**********						
*	A-4369-193-A	POWER BOARD, COMPLETE (AEP, IT)				
		**********				
*	A-4369-202-A	POWER BOARD, COMPLETE (E, PX)				
		**********				
*	A-4371-219-A	POWER BOARD, COMPLETE (MX)				
		**********				
*	A-4371-223-A	POWER BOARD, COMPLETE (AUS)				
		**********				
*	3-309-144-21	HEAT SINK (AUS)				
*	3-309-144-41	HEAT SINK (EXCEPT AUS)				
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S				
		< CAPACITOR >				
⚠C1	1-161-744-51	CERAMIC	0.01uF		400V	
C1601	1-124-907-11	ELECT	10uF	20%	50V	
C1602	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C1603	1-124-907-11	ELECT	10uF	20%	50V	
C1604	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C1605	1-124-463-00	ELECT	0.1uF	20%	50V	
C1606	1-124-557-11	ELECT	1000uF	20%	25V	
C1607	1-164-159-11	CERAMIC	0.1uF		50V	
C1611	1-124-910-11	ELECT	47uF	20%	50V	
C1612	1-124-907-11	ELECT	10uF	20%	50V	
C1613	1-124-122-11	ELECT	100uF	20%	50V	
		< CONNECTOR >				
* CN1	1-564-321-00	PIN, CONNECTOR 2P				
		< DIODE >				
D1601	8-719-987-63	DIODE 1N4148M				
D1602	8-719-200-82	DIODE 11ES2				
D1603	8-719-200-82	DIODE 11ES2				
D1604	8-719-200-82	DIODE 11ES2				
D1605	8-719-200-82	DIODE 11ES2				
D1606	8-719-987-63	DIODE 1N4148M				
D1611	8-719-014-66	DIODE UZP-5.6B				
D1612	8-719-002-60	DIODE UZL-33L				

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

POWER | POWER AMP

Ref. No.	Part No.	Description				Remark
D1613	8-719-200-82	DIODE	11ES2			
		< IC >				
IC1601	8-759-820-13	IC	L78MR06			
		< TRANSISTOR >				
Q1611	8-729-141-83	TRANSISTOR	2SB1094-LK			
Q1621	8-729-119-78	TRANSISTOR	2SC403SP-51			
		< RESISTOR >				
R1601	1-249-417-11	CARBON	1K	5%	1/4W F	
R1602	1-249-429-11	CARBON	10K	5%	1/4W	
⚠R1603	1-212-849-00	FUSIBLE	4.7	5%	1/4W F	
R1611	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R1612	1-249-421-11	CARBON	2.2K	5%	1/4W F	
⚠R1613	1-212-934-00	FUSIBLE	1	5%	1/2W F	
R1621	1-249-428-11	CARBON	8.2K	5%	1/4W F	
R1622	1-249-433-11	CARBON	22K	5%	1/4W	
R1623	1-249-400-11	CARBON	39	5%	1/4W F	(AEP, IT, MX)
R1624	1-249-400-11	CARBON	39	5%	1/4W F	(AEP, IT, MX)
		< RELAY >				
RY1	1-515-720-11	RELAY (E, AUS, MX, PX)				
RY1	1-515-738-11	RELAY, POWER (AEP, IT)				
		< SWITCH >				
⚠SW1	1-572-266-11	SWITCH, VOLTAGE SELECTION (E, PX)				
		< TRANSFORMER >				
⚠T2	1-423-929-21	TRANSFORMER, POWER (SUB) (AEP, IT)				
⚠T2	1-423-930-21	TRANSFORMER, POWER (SUB) (E, AUS, MX, PX)				
**********						
*	A-4369-197-A	POWER AMP BOARD, COMPLETE (AEP)				
		**********				
*	A-4369-205-A	POWER AMP BOARD, COMPLETE (E, AUS, PX)				
		**********				
*	A-4371-231-A	POWER AMP BOARD, COMPLETE (IT)				
		**********				
*	A-4371-222-A	POWER AMP BOARD, COMPLETE (MX)				
		**********				
		< CAPACITOR >				
C1201	1-126-163-11	ELECT	4.7uF	20%	50V	
C1202	1-137-359-11	FILM	150PF	5%	50V	
C1203	1-137-360-11	FILM	220PF	5%	50V	
C1204	1-124-910-00	ELECT	47uF	20%	50V	
C1205	1-124-910-11	ELECT	47uF	20%	50V	
C1206	1-124-122-11	ELECT	100uF	20%	50V	
C1208	1-124-916-11	ELECT	22uF	20%	63V	
C1210	1-136-163-11	FILM	0.068uF	5%	50V	
C1211	1-136-163-11	FILM	0.068uF	5%	50V	
C1220	1-126-176-11	ELECT	220uF	20%	10V	
C1251	1-126-163-11	ELECT	4.7uF	20%	50V	
C1252	1-137-359-11	CERAMIC	150PF	5%	50V	
C1253	1-137-360-11	FILM	220PF	5%	50V	
C1254	1-124-910-00	ELECT	47uF	20%	50V	
C1255	1-124-910-11	ELECT	47uF	20%	50V	
C1256	1-124-122-11	ELECT	100uF	20%	50V	
C1260	1-136-163-11	FILM	0.068uF	5%	50V	
C1261	1-136-163-11	FILM	0.068uF	5%	50V	
		< CONNECTOR >				
* CN1203	1-564-518-11	PLUG, CONNECTOR 3P				
CN1204	1-564-511-11	PLUG, CONNECTOR 8P				
		< IC >				
IC1201	8-749-900-24	IC	STK-4162MK2 (AEP, IT)			
IC1201	8-749-900-34	IC	STK-4182MK2 (E, AUS, PX)			
IC1201	8-749-920-10	IC	STK-4172MK2 (MX)			
		< DIODE >				
D1201	8-719-987-63	DIODE	1N4148M			
D1202	8-719-987-63	DIODE	1N4148M			
D1251	8-719-987-63	DIODE	1N4148M			
		< TRANSISTOR >				
Q1201	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q1251	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
		< RESISTOR >				
R1201	1-249-417-11	CARBON	1K	5%	1/4W F	
R1202	1-249-438-11	CARBON	56K	5%	1/4W	
R1203	1-249-414-11	CARBON	560	5%	1/4W F	
R1204	1-249-438-11	CARBON	56K	5%	1/4W	
R1205	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP, IT)
R1205	1-249-427-11	CARBON	6.8K	5%	1/4W F	(E, AUS, MX, PX)
R1206	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP, IT)
R1206	1-249-427-11	CARBON	6.8K	5%	1/4W F	(E, AUS, MX, PX)
R1207	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP, IT)
R1207	1-249-427-11	CARBON	6.8K	5%	1/4W F	(E, AUS, MX, PX)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

POWER AMP | TABLE MOTOR | VR

Ref. No.	Part No.	Description				Remark
R1208	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP, IT)
R1208	1-249-427-11	CARBON	6.8K	5%	1/4W F	(E, AUS, MX, PX)
⚠R1209	1-212-881-11	FUSIBLE	100	5%	1/4W F	
⚠R1210	1-217-151-00	RES, METAL PLATE	0.22		2W	
R1211	1-249-417-11	CARBON	1K	5%	1/4W F	
R1212	1-249-431-11	CARBON	15K	5%	1/4W	
R1213	1-249-441-11	CARBON	100K	5%	1/4W	
R1214	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R1215	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R1216	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R1217	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R1218	1-249-397-11	CARBON	22	5%	1/4W F	
R1219	1-249-397-11	CARBON	22	5%	1/4W F	
R1227	1-249-429-11	CARBON	10K	5%	1/4W	
R1228	1-249-441-11	CARBON	100K	5%	1/4W	
R1230	1-249-425-11	CARBON	4.7K	5%	1/4W F	(E, AUS, PX)
R1230	1-249-429-11	CARBON	10K	5%	1/4W	(AEP, IT, MX)
R1243	1-249-383-11	CARBON	1.5	5%	1/6W F	
R1251	1-249-417-11	CARBON	1K	5%	1/4W F	
R1252	1-249-438-11	CARBON	56K	5%	1/4W	
R1253	1-249-414-11	CARBON	560	5%	1/4W F	
R1254	1-249-438-11	CARBON	56K	5%	1/4W	
R1255	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP, IT)
R1255	1-249-427-11	CARBON	6.8K	5%	1/4W F	(E, AUS, MX, PX)
R1256	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP, IT)
R1256	1-249-427-11	CARBON	6.8K	5%	1/4W F	(E, AUS, MX, PX)
R1257	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP, IT)
R1257	1-249-427-11	CARBON	6.8K	5%	1/4W F	(E, AUS, MX, PX)
R1258	1-249-425-11	CARBON	4.7K	5%	1/4W F	(AEP, IT)
R1258	1-249-427-11	CARBON	6.8K	5%	1/4W F	(E, AUS, MX, PX)
⚠R1259	1-212-881-11	FUSIBLE	100	5%	1/4W F	
⚠R1260	1-217-151-00	RES, METAL PLATE	0.22		2W	
R1261	1-249-417-11	CARBON	1K	5%	1/4W F	
R1262	1-249-431-11	CARBON	15K	5%	1/4W	
R1263	1-249-441-11	CARBON	100K	5%	1/4W	
R1268	1-249-397-11	CARBON	22	5%	1/4W F	
R1269	1-249-397-11	CARBON	22	5%	1/4W F	

****

Ref. No.	Part No.	Description				Remark
*	1-638-729-11	TABLE MOTOR BOARD				
		**********				
		< CAPACITOR >				
C704	1-161-375-00	CERAMIC	0.0022uF	20%	50V	
		< CONNECTOR >				
* CN707	1-573-044-11	SOCKET, CONNECTOR 5P				
		< DIODE >				
D701	8-719-970-19	DIODE GP1A521				
		< MOTOR >				
M701	A-4604-585-A	MOTOR ASSY, ROTARY (TABLE)				
		< RESISTOR >				
R701	1-249-416-11	CARBON	820	5%	1/4W F	

****

*	1-651-167-11	VR BOARD				
		********				
		< CAPACITOR >				
C1185	1-164-159-11	CERAMIC	0.1uF		50V	
C1507	1-161-494-00	CERAMIC	0.022uF		25V	
C1508	1-124-443-00	ELECT	100uF	20%	10V	
		< CONNECTOR >				
* CN1502	1-568-934-11	PIN, CONNECTOR 7P				
		< IC >				
IC1504	8-759-820-62	IC LB1639				
		< VARIABLE RESISTOR >				
RV1185	1-241-350-11	RES, VAR, CARBON 100K/100K (VOLUME)				

****

MISCELLANEOUS

****

⚠6	1-575-653-11	CORD, POWER (E, MX)	
⚠7	1-575-651-11	CORD, POWER (AEP, IT)	
⚠8	1-569-007-11	ADAPTER, CONVERSION 2P (PX)	
11	1-765-365-11	CORD, CONNECTION (15 CORE)	
12	1-690-824-11	WIRE (FLAT TYPE) (25 CORE)	
13	1-575-906-11	WIRE, FLAT TYPE (15 CORE)	(AEP, IT)
13	1-590-459-11	WIRE, FLAT TYPE (11 CORE)	(E, AUS, MX, PX)
60	1-765-385-11	WIRE (FLAT TYPE) (34 CORE)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
79	1-751-210-11	WIRE (FLAT TYPE) (13 CORE)	
83	1-751-025-11	WIRE (FLAT TYPE) (9 CORE)	
116	1-590-485-11	WIRE, FLAT TYPE (7 CORE)	
167	1-638-983-11	MOTOR FLEXIBLE BOARD	
264	1-537-645-11	JUMPER, FILM (WITH TERMINAL)	
* 306	1-452-538-11	MAGNET	
311	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
⚠351	8-848-144-11	OPTICAL PICK-UP BLOCK (KSS-240A)	
352	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
D701	8-719-970-19	DIODE GP1A521	
⚠F101	1-532-286-00	FUSE (T2.5A)	
⚠F102	1-532-286-00	FUSE (T2.5A)	
⚠F103	1-532-299-00	FUSE (T5.0A)	
⚠F104	1-532-299-00	FUSE (T5.0A)	
HP101	A-2003-837-F	DECK ASSY, HEAD (DECK A)	
HRPE101	A-2003-838-F	DECK ASSY, HEAD (DECK B)	
IC81A	8-749-924-10	PHOTO REFECTOR NJ5165-B (DECK A)	
IC81B	8-749-924-10	PHOTO REFECTOR NJ5165-B (DECK B)	
M101A	X-3363-501-1	MOTOR ASSY (REEL) (DECK A)	
M101B	X-3363-501-1	MOTOR ASSY (REEL) (DECK B)	
M102A	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK A)	
M102B	X-3365-377-1	MOTOR ASSY (CAPSTAN) (DECK B)	
M101	X-4917-504-1	MOTOR ASSY (SLED)	
M102	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M701	A-4604-585-A	MOTOR ASSY, ROTARY	
M702	A-4604-834-A	MOTOR ASSY, LOADING	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	
⚠T1	1-423-927-21	TRANSFORMER, POWER (AEP, IT)	
⚠T1	1-423-928-21	TRANSFORMER, POWER (E, AUS, PX)	
⚠T1	1-426-826-11	TRANSFORMER, POWER (MX)	
⚠T2	1-423-929-21	TRANSFORMER, POWER (AEP, IT)	
⚠T2	1-423-930-21	TRANSFORMER, POWER (E, AUS, MX, PX)	

****

ACCESSORIES & PACKING MATERIALS

****

1-467-547-11 COMMANDER, STANDARD (RM-S421)
1-501-369-11 ANTENNA (AEP, IT)
1-501-374-11 ANTENNA, LOOP (AEP, IT)
1-501-594-11 ANTENNA (FM) (AEP, IT)
2-181-754-21 COVER, BATTERY (for RM-S421)

Ref. No.	Part No.	Description	Remark
	3-758-505-41	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)	
	3-758-505-51	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, IT)	
	3-758-505-71	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (E, AUS, PX)	
	3-758-505-81	MANUAL, INSTRUCTION (SPANISH) (MX)	
	4-937-945-01	PLATE (TRANSPORT), LOCK	
*	4-963-783-01	INDIVIDUAL CARTON (AEP)	
*	4-967-047-01	CUSHION (AEP, E, AUS, MX, PX)	

****

****

HARDWARE LIST

****

#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
#3	7-682-548-04	SCREW +BVTT 3X8 (S)	
#5	7-621-773-93	SCREW (PANEL 2.6 TP2)	
#6	7-627-556-08	SCREW +P 2.6X2.8	
#7	7-621-775-00	SCREW +B 2.6X3	
#8	7-682-961-01	SCREW +PSW 4X8	
#9	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT	
#10	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#11	7-682-554-04	SCREW +B 3X25	
#12	7-621-255-15	SCREW +P 2X3	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-959-389-11

Sony Corporation
Audio Group

English
94C0960-1
Printed in Japan
© 1994.3
Published by Audio Sector Quality Assurance Dept.